INSTITUTO
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Job Resources and “Lying Flat” at work among Primary-Level Psychiatrists: Based on Job Demands–Resources and Conservation of Resources Theories

CHEN Chonggang

Doctor of Management

Supervisor:
PhD MA Shaozhuang, Associate Professor with Habilitation,
ISCTE University Institute of Lisbon

October, 2025

BUSINESS
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Marketing, Operations and General Management Department

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Abstract

Background and objectives: Primary-level psychiatrists in China face problems of high work stress and resort to “lying flat” at work. This study aims to explore the mechanism through which job resources influence “lying flat” among primary-level psychiatrists and to examine the moderating effects of job demands therein in order to provide both theoretical and empirical references for alleviating the problem of “lying flat” among primary-level psychiatrists.

Methods: Based on the job demands-resources (JD-R) theory and conservation of resources (COR) theory, this study proposes a hypothesized model in which job resources serve as independent variables, reduced personal accomplishment as a mediator, job demands as moderators, and “lying flat” at work as the dependent variable. This study conducted a questionnaire survey among a sample of 232 primary-level psychiatrists. Using SPSSAU 25.0, regression analysis and structural equation modeling were employed to test the hypothesized model.

Results: 1) Reduced personal accomplishment translates job resources into the negative state of “lying flat” at work. Specifically, reduced personal accomplishment partially mediates the relationship between perceived organizational support and “lying flat”, and fully mediates the relationship between work autonomy and “lying flat”. 2) Job demands weaken the motivational mechanism of job resources, thereby increasing “lying flat” among psychiatrists. Specifically, i) patient threats and violence weaken the negative relationship between perceived organizational support and reduced personal accomplishment, as well as between work autonomy and reduced personal accomplishment; ii) role conflict weakens the negative relationship between perceived organizational support and reduced personal accomplishment; and iii) workload weakens the negative relationship between work autonomy and reduced personal accomplishment.

Conclusions and implications: The findings challenge the boost hypothesis of job demands in the JD-R model and provide a new research perspective. Based on the findings, this study also proposes coping strategies to reduce “lying flat” at work.

Keywords: Job Demands-Resources Model; Conservation of Resources Theory; Lying Flat at work; Psychiatrists

JEL: J28, I11

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Resumo

Contexto e objetivos: Os psiquiatras de nível primário na China enfrentam elevados níveis de stresse, que conduzem ao fenómeno de "*lying flat*" no trabalho. Este estudo tem como objetivo explorar o mecanismo através do qual os recursos do trabalho influenciam o "*lying flat*" entre psiquiatras de nível primário, bem como examinar os efeitos moderadores das exigências do trabalho. O propósito consiste em fornecer referências teóricas e empíricas que contribuam para mitigar o problema do "*lying flat*" entre os psiquiatras de nível primário.

Métodos: Com base na teoria das exigências-recursos do trabalho (*job demands-resources*, JD-R) e na teoria da conservação dos recursos (*conservation of resources*, COR), este estudo propõe um modelo hipotético no qual os recursos do trabalho atuam como variáveis independentes, a redução da realização pessoal como variável mediadora, as exigências do trabalho como variáveis moderadoras e o "*lying flat*" no trabalho como variável dependente. Foi realizado um inquérito por questionário junto de uma amostra de 232 psiquiatras de nível primário. Utilizando o SPSSAU 25.0, foram conduzidas análises de regressão e modelação de equações estruturais para testar o modelo hipotético.

Resultados: 1) A redução da realização pessoal transforma os recursos do trabalho no estado negativo de "*lying flat*" no trabalho. Especificamente, a redução da realização pessoal medeia parcialmente a relação entre o apoio organizacional percebido e o "*lying flat*", e medeia totalmente a relação entre a autonomia no trabalho e o "*lying flat*". 2) As exigências do trabalho enfraquecem o mecanismo motivacional dos recursos do trabalho, aumentando assim o "*lying flat*" entre os psiquiatras. Especificamente: i) as ameaças e violência dos pacientes enfraquecem as relação negativa entre o apoio organizacional percebido e a redução da realização pessoal, bem como entre a autonomia no trabalho e a redução da realização pessoal; ii) o conflito de papéis enfraquece a relação negativa entre o apoio organizacional percebido e a redução da realização pessoal; e iii) a carga de trabalho enfraquece a relação negativa entre a autonomia no trabalho e a redução da realização pessoal.

Conclusões e implicações: As conclusões desafiam a hipótese de reforço das exigências do trabalho no modelo JD-R e oferecem uma nova perspetiva de investigação. Com base nestes resultados, o estudo também propõe estratégias de atuação para reduzir o "*lying flat*" no trabalho.

Palavras-chave: Modelo das Exigências-Recursos do Trabalho; Teoria da Conservação dos Recursos; Lying Flat no Trabalho; Os psiquiatras
JEL: J28, I11

摘　要

背景和目的：中国的基层精神科医生面临工作压力大的问题，常以“躺平”的方式来应对。本研究旨在探讨工作资源对基层精神科医生躺平的影响机制，并检验工作要求的调节效应，为缓解基层精神科医生躺平困境提供理论和实证依据。

研究方法：根据工作-要求资源理论和资源保存理论，本研究提出了工作资源为自变量，个人低成就感为中介变量，工作要求为调节变量和躺平为结果变量的假设模型。研究采用问卷调查法，以232名基层精神科医生为样本，使用SPSSAU25.0用回归分析和结构方程模型对假设模型进行检验。

研究结果：1.个人低成就感将工作资源转化为躺平的消极行为，具体包括个人低成就感在组织支持感与“躺平”之间起部分中介作用，而在工作自主性与躺平之间起完全中介作用。2. 工作要求侵蚀工作资源的动机机制并导致精神科医生“躺平”，具体包括（1）患者威胁与暴力弱化组织支持感、工作自主性与个人低成就感间的负相关关系；（2）角色冲突弱化组织支持感与个人低成就感间的负相关关系；（3）工作负荷弱化工作自主性与个人低成就感间的负相关关系。

结论与启示：研究结果挑战了JDR理论中工作要求的助推假说，提出了新的研究视角。论文根据研究结果提出了降低躺平的应对措施。

关键词：工作要求和工作资源模型；资源保存理论；工作躺平；精神科医生

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时光荏苒，岁月如梭。历时数载的博士研究生生涯即将画上句点，毕业论文也终于在此刻落笔定稿。回首这段充满挑战与收获的旅程，心中充满了留恋与不舍。论文的顺利完成，离不开各位老师、同学、同事以及重庆市各区县精神卫生中心的鼎力支持与无私帮助，我定会将大家的支持和帮助铭记于心，变为我前行的动力。

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List of Abbreviations

AGFI = Adjusted Goodness-of-Fit Index

AIC = Akaike Information Criterion

ANOVA = Analysis of variance

AVE = Average variance extracted

BIC = Bayesian Information Criterion

CFA = confirmatory factor analysis

CFI = Comparative Fit Index

CITC = corrected item-total correlation

COR = Conservation of resources

CR = Composite reliability

DCS = Demand-control-support

LF = Lying flat

EFA = Exploratory factor analysis

JCM = Job characteristics model

JDC = Job demand-control

JD-R = Job demands-resources

MBI = Maslach Burnout Inventory

MBI-GS = Maslach Burnout Inventory – General Survey

MI = Modification indices

MLE = Maximum likelihood estimation

OLBI = Oldenburg Burnout Inventory

PA = Reduced personal accomplishment

PGFI = Parsimony Goodness-of-Fit Index

PNFI = Parsimony Normed Fit Index

POS = Perceived organizational support

RC = Role conflict

RMR = Root Mean Square Residual

RMSEA = Root Mean Square Error of Approximation

SD = standard deviations

SDT = Self-determination theory

SEM = Structural equation modeling

SRMR = Standardized Root Mean Square Residual

TAV = Patient threats and violence

UWES = Utrecht Work Engagement Scale

WA = Work autonomy

WL = Workload

Chapter 1: Introduction

This chapter outlines the practical social context and theoretical background of the phenomenon of “lying flat”, explains the objectives and significance of this study, and presents the research questions and methods.

1.1 Research background

1.1.1 Practical problem

In today’s rapidly changing information society, fierce competition has become the norm. While such competition drives social development and brings numerous opportunities, it also introduces new challenges, among which the “lying flat” work state is one of the most prominent ones. In April 2021, an online article titled *Lying Flat is Justice* (Chen & Cao, 2021) described in detail a lifestyle of taking temporary jobs and maintaining low life costs to meet basic needs while avoiding work stress and competition. The article quickly sparked widespread discussion, and “lying flat” became one of the top 10 internet buzzwords of that year. Currently, the so-called “lying flat” phenomenon is mainly characterized by a “go with the flow” mentality, with a lack of enthusiasm and motivation toward work and life as the core. Specifically, it manifests as a lack of enthusiasm and expectations toward work, no longer regarding hard work and self-realization as life goals, and adopting a perfunctory and indifferent attitude toward one’s profession. This long-term passive and escapist behavior and state of inaction and “going with the flow”, developed as a response to the intense social “involution” pressure, is referred to as “lying flat”.

The phenomenon of “lying flat” at work has caused enormous harm and loss to organizations and society (Cheng et al., 2023). For instance, “lying flat” may directly reduce organizational efficiency. “Lying flat” causes substantial economic losses for US companies due to poor performance, with an estimated annual loss of 450 to 550 billion USD. Employees’ “lying flat” may also lead to adverse outcomes such as reduced morale and productivity, increased turnover, and a rise in workplace accidents (Rastogi et al., 2018). “Lying flat” has become a persistent problem for enterprises and organizations, receiving immense attention across society. As a passive work state among modern professionals during a period of

transformation, the “lying flat” state has gradually affected all professions and industries, causing massive economic losses each year worldwide. Employees who “lie flat” not only show lower productivity but also contribute to higher turnover rates and additional costs for recruitment and training of new employees. This directly impacts enterprises’ productivity, resulting in low efficiency, lack of initiative, and reduced creativity, leading to decreased overall output. In 2024, employee engagement declined by 2% to 21% globally, and the resulting reduced productivity led to global economic losses of 438 billion USD (Gallup, 2025). Such losses are not only due to decreased productivity but also to higher employee turnover, increased recruitment and training costs, and include indirect losses due to reduced customer satisfaction (Gopal, 2006). A survey has shown that more than 70% of the workforce is in a passive or active “lying flat” state, and due to a lack of engagement and motivation, the organization’s overall productivity decreases significantly. Such employees show low efficiency and initiative, which directly hinders the achievement of organizational goals. They are less likely to remain committed to their organizations and are more prone to turnover, thereby increasing the organization’s recruitment and training costs while undermining team continuity and experience accumulation. They also tend to poorly represent corporate culture or provide quality service to clients, leading to declines in customer satisfaction and loyalty. As a result of employees’ “lying flat”, American enterprises may lose up to trillions of USD annually (Gallup, 2023). A sample survey of “lying flat” among Chinese university students reported the rates of academic “lying flat”, life “lying flat”, and social “lying flat” as high as 32.7%, 17.8%, and 17.5%, respectively (Ma et al., 2024).

However, in reality, the general public still has a limited understanding of the harm and underlying contradictions behind the “lying flat” work state, and academic research on this phenomenon in the healthcare sector remains limited. In fact, the origins and further spread of the “lying flat” phenomenon are closely related to the economic and social backgrounds. In particular, China is currently in a crucial period of socioeconomic transformation. With the slowing of economic growth and ongoing industrial restructuring, development opportunities are gradually shrinking across industries, making competition increasingly intense, ultimately impacting individuals’ work and life to varying degrees. In such an environment, many people perceive pressures from professional development, career uncertainty, and intense job competition. In response to these difficulties, they choose to “lie flat”. For another, with the rapid economic growth following the reform and opening-up, China has entered a moderately prosperous society, and material abundance has provided people with more choices in lifestyle and work mode. Under such material affluence, some individuals opt for more comfortable

living rather than striving for professional advancement, which fosters the emergence and spread of the “lying flat” phenomenon. Moreover, the “996” work culture, namely, working 12 hours a day and six days a week, although officially deemed illegal, still persists, and changing such high-pressure work environments will take time. The intensity of such work schedules and high work stress has led many employees to become disengaged and dissatisfied with work, making it one of the major driving forces behind “lying flat” (Huld, 2023).

The “lying flat” phenomenon among psychiatrists deserves particular attention. Statistics indicated that more than 70% of employees were either passively or actively disengaged (Wilson, 2014). Compared with general employees, psychiatrists face greater stress due to patient violence and higher workloads, making them a group more prone to “lying flat”. Mental health is an essential component of public health and a key aspect of building a healthy China and healthcare undertakings, holding great significance for improving national healthcare systems and safeguarding the public’s physical and mental well-being. For psychiatrists, who provide mental health services, any psychological problems among themselves may impair their ability to deliver quality care to the public, making their own mental well-being particularly important. When primary-level psychiatrists show a “lying flat” state at work, it reflects their lack of enthusiasm, stagnation in self-improvement, and avoidance of challenges. The “lying flat” state not only reduces healthcare professionals’ job performance and satisfaction but also poses significant obstacles to improving psychiatric healthcare services, hindering the advancement of healthcare reform.

In recent years, the Chinese government has placed great attention on healthcare reform, with psychiatric healthcare being one of its key areas. In May 2021, the General Office of the State Council issued the *Opinions on Promoting the High-quality Development of Public Hospitals* (General Office of the State Council, 2021); in April 2022, the State Council released *The 14th Five-Year Plan for National Health*. Both documents emphasized the need to improve mental health and psychiatric healthcare services and develop a high-quality psychiatric workforce, explicitly requiring the high-quality development of hospitals (General Office of the State Council, 2022). In September 2020, the National Health Commission, the National Development and Reform Commission, and other authorities jointly issued the *Opinions on Strengthening and Improving Psychiatric Healthcare Services*, calling for improving the psychiatric service system, enhancing psychiatric service capacity, increasing the number of psychiatrists, optimizing the structure of psychiatric professionals, and improving related policies to motivate healthcare professionals (National Health Commission of China et al., 2020). The goal is to build a psychiatric healthcare system with an optimized workforce

structure and improved service capacity, enabling higher-quality psychiatric healthcare services for patients.

However, there remains a large gap between these goals and the current situation. Although China currently has over 63,000 psychiatrists, it still faces insufficient service capacity and a shortage of workforce (National Health Commission of China, 2023). Meanwhile, mental health issues are on the rise. Given the limited human resources, the “lying flat” state of primary-level psychiatrists only exacerbates the challenges of reaching the goals mentioned above and building a high-quality, efficient healthcare system, creating a vicious cycle.

In many districts or counties, there is often only one public psychiatric hospital. Psychiatrists are not worried about a lack of patients but rather overwhelmed by having too many. Each psychiatrist is often responsible for managing dozens of patients, with heavy workloads that constrain their work to merely ensuring that “patients are managed with no occurrence of incidents”. As key actors in psychiatric healthcare reform, primary-level psychiatrists have long worked in environments where their occupational well-being and mental health have not received sufficient attention. They endure higher work stress than physicians in general hospitals but receive less care and support, making them highly prone to “lying flat”. When psychiatrists enter a “lying flat” work state, they lose aspirations for career development, stop striving for professional improvement, avoid conflicts and challenges, are discouraged from making breakthroughs in healthcare, and show apathy and a lack of enthusiasm toward patients and work, inevitably reducing hospitals’ overall healthcare quality and posing risks to healthcare safety. Such a passive state hinders the sustainable development of psychiatric healthcare services and inevitably weakens the overall effectiveness of healthcare reform.

Taking a psychiatric hospital in a district of Chongqing City as an example, it is a tertiary specialty hospital currently applying for Class A tertiary status to become a psychiatric healthcare center in the central region of the Chengdu-Chongqing corridor. Achieving this goal requires a highly motivated and skilled workforce who are capable of delivering quality services and conducting scientific research. The hospital has 1,100 staffed beds, including 800 for the psychiatric specialty. However, due to staffing limitations, it employs only 35 psychiatrists and 159 psychiatric nurses, which means, 0.05 psychiatrists and 0.20 nurses per bed. Psychiatrists are responsible for tasks such as identification and review of mental disorder conditions, free medication distribution, and psychological emergency response, all of which require frequent contact with patients and their families. As many psychiatric patients are emotionally unstable and potentially aggressive, psychiatrists often face personal safety threats from them. For the sake of public safety and social stability, psychiatrists cannot decide how many patients to

accept, as all involuntarily admitted patients must be accepted. Given the shortage of psychiatrists, it makes their workloads far exceed those in general hospitals, resulting in greater stress. Although the hospital’s pursuit of Class A tertiary status is a positive initiative for improving the hospital’s management and service quality, in practice, it significantly increases physicians’ workloads. In addition to patient treatment, psychiatrists must handle tasks such as identification and review of mental disorder conditions, free medication distribution, training for township physicians specialized in mental health prevention and treatment, and psychiatric community rehabilitation, as well as public welfare tasks such as psychological emergency response.

Such extensive responsibilities can make psychiatrists feel that their duties are “inexhaustible”. Moreover, as most patients in primary psychiatric hospitals suffer from severe mental disorders that require closed treatment, relevant authorities are mainly concerned with safety and basic security rather than medical advancement. These patients are primarily treated through government-funded basic health services with limited budgets, which can merely cover the essential care. As a result, hospitals are not motivated to invest in new technology, talent development, or medical equipment. Furthermore, due to the specialization of psychiatric work, it is difficult for primary-level psychiatrists to transfer to other positions, limiting their career mobility. As most psychiatric patients are treated with government funds, with the implementation of capped funding in medical insurance, hospital revenues remain very low, and treatment methods are relatively undiversified. Psychiatrists have little autonomy in selecting treatment approaches or prescribing medications. They are fatigued by repetitive tasks, often writing similar case notes and prescribing similar medications for the same patients, day after day. Such monotony reduces their work enthusiasm. Given the high number of patients, they have little time or motivation for self-improvement. Many are unwilling to participate in external professional training, attend academic conferences, or apply for research projects. According to the hospital’s statistics, from 2021 to 2023, only two psychiatrists voluntarily applied for external training, only 17 attended academic conferences, and only 23 innovation projects were initiated, far below the citywide average for tertiary public hospitals.

In such working conditions, psychiatrists lack the time and energy for continuing education or professional growth, show little motivation to tackle technical challenges in diagnosis and treatment, and have weak aspirations for career promotion. They tend to “go with the flow” and passively accept their environment, easily entering a “lying flat” state, which manifests as doing the bare minimum, lacking enthusiasm and initiative, and avoiding difficulties and conflicts. “Lying flat” in work is highly detrimental to the sustainable development of hospitals.

Physicians in this state lack passion for their profession, do not strive for improvement, and show reduced work engagement, inevitably leading to compromised healthcare quality and efficiency, ultimately harming patient interests and impeding the progress of the healthcare sector. Although the hospital has tried to incentivize them through higher performance-based pay, research rewards, and promotion opportunities, little improvement has been observed in their work enthusiasm, engagement, or initiative. How to eliminate unhealthy mental states such as “lying flat” and enhance the motivation of primary-level psychiatrists has thus become a crucial issue. It is necessary to conduct more in-depth research on the “lying flat” work state, measure its prevalence among primary-level psychiatrists, examine the factors related to job demands and job resources that influence its formation, and develop targeted interventions to mitigate and prevent its impact on the high-quality development of hospitals. Through this research, we expect to identify strategies to address the“lying flat” work state, contributing to the high-quality development of psychiatric hospitals.

1.1.2 Theoretical background

“Lying flat” is equivalent to “disengagement”. In psychology and sociology, it refers to individuals’ behavior of withdrawing from social roles, career goals, or other social expectations. Cumming and Henry (1961), in their work *Growing Old: The Process of Disengagement*, first proposed the concept of disengagement. They pointed out that as people age, they gradually withdraw from their social roles. This process is bidirectional: society lowers its expectations of the elderly, while the elderly simultaneously reduce their participation in social roles. The authors regarded such withdrawal as a natural and inevitable process, a way for individuals to adapt to aging. In later studies, disengaged employees were described as “doing the bare minimum” and “going through the motions” (Pater, 2013).

Academic research on “lying flat” has been scattered across multiple disciplines, with growing attention to “disengagement” in psychology, sociology, and management. The concept captures a passive stance toward work and life characterized by minimal engagement, withdrawal from career striving, and in some cases reduced involvement in broader social participation (Lin & Gao, 2021; Lu et al., 2024). Viewed as a coping response to mounting societal pressure, the phenomenon has become a salient concern for organizations and society, reflected in its designation as one of China’s “Top 10 Internet Terms of 2021” (Editorial Department of Yaowenjiaozi , 2021) and its growing relevance in contemporary psychological and sociological research (Lin & Gao, 2021; Lu et al., 2024; Zheng et al., 2023).

Despite increasing scholarly attention, Xia and Niu (2025) highlighted that existing

research remains largely descriptive, emphasizing conceptual definitions rather than developing validated measures, theoretically grounded models, or robust psychological mechanisms that explain how contextual pressures translate into “lying flat”. Although lying flat has often been framed as a response to escalating social competition in China (Zhang et al., 2025), we contend that it is more fundamentally a coping response to intensifying workplace competition (Xia & Niu, 2025). This perspective highlights an urgent need to examine “lying flat at work”. However, prior research has largely overlooked the psychological processes through which high-pressure work environments elicit lying-flat behaviors. These gaps underscore the need for empirical studies that systematically investigate how job and work characteristics contribute to the emergence of “lying flat at work”. Applying established frameworks such as the Job Demands-Resources (JD-R) model (Demerouti et al., 2001) and Conservation of Resources (COR) theory (Hobfoll, 1989, 2001) can provide a theoretically rigorous foundation for advancing this line of inquiry.

The development and growing application of the JD-R theory and the COR theory provide an essential theoretical framework for studying “lying flat” at work. These theories help analyze how various factors in the workplace influence the “lying flat” work state. The COR theory was initially developed for stress and coping research, with its application later expanded to studies of burnout and related topics. Building on the COR theory, the JD-R model further proposed two independent yet interacting processes: in the health impairment process, high job demands lead to burnout; in the motivational process, high job resources enhance employees’ motivation, self-efficacy, and work engagement (Bakker & Demerouti, 2007). Although the JD-R theory is well-suited to explain the possible challenges faced by psychiatrists in high-pressure work environments, its application to burnout and work engagement among primary-level psychiatrists remains limited. This study, using the JD-R theory as the framework, intends to examine primary-level psychiatrists’ “lying flat” work state.

Research on “lying flat” not only involves a process of theory construction but also the theory’s testing and refinement. Through intervention studies, it is possible to identify strategies for preventing or reducing “lying flat” at work. Compared with mainstream topics in management and sociology, “lying flat” remains a novel and evolving research field with many issues still requiring further clarification. Both in China and internationally, studies on psychiatrists’ “lying flat” are still emerging, yet carry significant implications. The “lying flat” work state among psychiatrists affects not only their physical and mental health and professional development but also the patients to whom they provide psychiatric healthcare services. Therefore, systematically studying the “lying flat” state of psychiatrists holds great

theoretical and practical significance.

Therefore, to address these gaps, we integrate JD-R and COR perspectives to investigate lying flat at work among primary-level psychiatrists in China, a workforce operating under exceptionally high strain. From a psychological and occupational health perspective, lying flat at work can be understood as a deliberate withdrawal-oriented response to sustained strain (Xia & Niu, 2025; Yin et al., 2023), mirroring longstanding notions of employee disengagement and reduced role investment (Afrahi et al., 2022; Kahn, 1990). COR theory posits that individuals strive to acquire, protect, and retain valued resources, and that actual or threatened resource loss evokes defensive coping responses such as withdrawal (Hobfoll, 1989, 2001). In this view, we argue resource depletion (or the anticipation of imminent loss) constitutes a central mechanism underlying lying flat.

This study focuses on primary-level psychiatrists, exploring their "lying flat" status and its formation mechanism by examining the relationships among job demands, job resources, burnout, and "lying flat". Specifically, it reveals how job demands and job resources influence the development of "lying flat" among primary-level psychiatrists. Using a questionnaire survey, this study analyzes in depth how factors such as organizational support, work autonomy, patient threats and violence, workload, and role conflict affect psychiatrists' work states, particularly their "lying flat" at work. The findings will provide empirical evidence for policymakers and hospital managers to develop effective strategies that enhance primary-level psychiatrists' work motivation, job satisfaction, and performance, thereby improving the overall quality and efficiency of psychiatric healthcare services in China.

1.2 Research problem

With ongoing socioeconomic development, people are experiencing increasing pressure in both work and life. The number of individuals with psychiatric and mental disorders continues to grow, indicating an increasing demand for psychiatric healthcare services. According to data from the *Global Burden of Disease Study 2019* released in 2020, approximately 971 million people worldwide (about 13% of the global population) suffered from some form of mental or addictive disorder (Rehm & Shield, 2019). According to data from the *China Mental Health Survey* released in 2019, the lifetime prevalence of mental disorders among Chinese adults was 16.6%, and the 1-year prevalence was 9.3% (Huang et al., 2019), corresponding to approximately 183 million people with a lifetime diagnosis and 102 million people with a 1-year diagnosis. For this reason, the Chinese government issued policy documents such as the

Opinions on Promoting the High-quality Development of Public Hospitals (General Office of the State Council, 2021) and *The 14th Five-Year Plan for National Health* (General Office of the State Council, 2022), calling for the development of a high-level mental health service workforce and the improvement of mental health service capacity.

It is evident that there is an enormous demand for mental health services. However, the work environment and work state of psychiatrists are in great contradiction with this growing demand and with the goals of healthcare reform. Primary-level psychiatrists, who play a key role in mental health system reform, face problems such as staffing shortages and limited available resources. They carry extremely heavy workloads and work under intense time pressure. For a long time, their occupational environment and mental well-being have not received sufficient attention. Compared with physicians in general medical institutions, psychiatrists bear greater work stress but receive less care and support, making them prone to a "lying flat" work state. A study of employees in the US public sector found that only 30% of American employees were engaged, while as many as 70% were either actively or passively "lying flat". The study suggested that reducing "lying flat" requires identifying and leveraging employees' individual strengths, skills, and potential (Wilson, 2014). "Lying flat" has severe negative outcomes. "Lying flat" at work was found to be significantly associated with an increased risk of patient safety incidents, including medical errors, declined care quality, and lower patient satisfaction (Hall et al., 2016). It is also associated with reduced professional performance, increased risk of medical errors, and higher rates of patient dissatisfaction, as well as decreased job satisfaction among healthcare professionals, increased turnover intention, and intention to change careers (Dewa et al., 2017).

The presence of a "lying flat" work state among primary-level psychiatrists may lead to their unwillingness to improve professional competence, a lack of motivation to tackle treatment challenges, and a lack of enthusiasm toward patients. This will inevitably lower the overall healthcare quality of hospitals and create substantial risks to medical quality and safety. It not only negatively affects job performance and job satisfaction but also directly undermines the quality of healthcare services available to the public and hinders the sustainable development of the healthcare sector.

As the work of primary-level psychiatrists is both critical and complex, it is necessary to thoroughly analyze their work environment and work state. Based on our observations in practice, primary-level psychiatrists face the following challenges in their work environment.

1) Limited organizational support. As patients admitted to primary-level psychiatric hospitals are mostly individuals with severe mental disorders, organizations primarily focus on

safety and basic healthcare rather than advanced treatment techniques. Given that their fiscal resources can only cover the minimum necessary treatment needs, organizations are unable to make adequate investments in new technologies or treatment equipment, and show limited initiative in capacitization for healthcare professionals. Primary-level psychiatrists face difficulty in transferring to other positions, making their career development pathways are highly constrained. As a result, the material, informational, and technical support that primary-level psychiatrists receive from their organizations is very limited.

2) Low work autonomy. Psychiatric patients are often unable to cooperate with treatment, showing unstable emotions and behaviors, and may at any time exhibit violent behavior. As a result, psychiatrists often have to deal with sudden and urgent situations, making their work frequently driven by patients. In addition, as the medical services for a large proportion of admitted psychiatric patients are funded by the government, service fees are extremely low, and treatment methods are relatively undiversified and fixed. Psychiatrists’ choices are highly constrained in terms of treatment plans, diagnostic procedures, and even medications. For the sake of public safety and social stability, hospitals are often obliged to admit patients beyond the authorized beds, and psychiatrists do not have full control over how many patients to admit or whether to admit specific patients. In general, primary-level psychiatrists have low work autonomy.

3) Frequent exposure to patient threats and violence. During treatment and patient management, primary-level psychiatrists are likely to face sudden deterioration in a patient’s mental state and encounter threats or violence from them. Conflict may also arise because some patients do not wish to be diagnosed with a mental disorder or attempt to seek higher disability ratings to obtain greater financial benefits. As patients with severe mental disorders often lack the capacity for autonomous behavior and can hardly cooperate with treatment, it is highly challenging to establish normal doctor-patient relationships. Patients with mental disorders often cannot accurately express treatment outcomes, and communication between doctors and patients is asymmetric. Poor communication easily leads to doctor-patient conflict, which further exposes psychiatrists to threats and violence from patients.

4) Heavy workloads. The workload of psychiatrists in primary-level psychiatric hospitals far exceeds that of physicians in general hospitals, resulting in tremendous work stress. Primary-level psychiatric hospitals already suffer from human resource shortages, yet they admit large numbers of patients with severe mental disorders who may pose safety risks. For the sake of public safety, refusing to admit such patients is not considered acceptable, making the number of admitted patients far exceeds what psychiatrists can normally manage. As a result,

psychiatrists in these hospitals often cannot work regular hours. Overtime work and the inability to take leave become routine.

5) Severe role conflict. Primary-level psychiatrists undertake a wide range of complex duties. In addition to the overwhelming treatments, they are also tasked with distributing medications free of charge, training and supervising township physicians specialized in mental health prevention and treatment, contributing to the development of community mental health service systems, providing peer support, performing identification and review of mental disorder conditions, assisting with psychiatric community rehabilitation, and participating in psychological counseling and psychological emergency response as part of public welfare duties. As a result, psychiatrists feel that their responsibilities are “inexhaustible” and cannot clearly articulate the full scope of their duties. These responsibilities correspond to multiple roles, including psychiatrists, rehabilitation therapists, forensic physicians, volunteers, supervisors, and psychological counselors, among others. The coexistence of numerous roles easily leads to confusion in identifying and recognizing their roles and responsibilities, thereby resulting in role conflict.

From the above analysis, it can be seen that primary-level psychiatrists have extremely limited job resources, such as low levels of organizational support and low work autonomy. At the same time, in terms of job demands, they face patient threats and violence, heavy workloads, and severe role conflict. This combination of high job demands and low job resources is highly likely to trigger burnout and may further lead to a “lying flat” work state. “Lying flat” psychiatrists tend to show less enthusiasm, less initiative, and low levels of work engagement. The contradiction between the “lying flat” state among primary-level psychiatrists and the continuously increasing demand for mental health services directly leads to reduced job performance, making it difficult for the public to receive high-quality mental health services. Once this situation reaches a certain threshold, it will inevitably hinder the development of the entire healthcare system, making it challenging to achieve the goals of healthcare reform and ultimately harming the health interests of the whole population. This study attempts to identify the factors influencing the “lying flat” state and to find solutions to mitigate or even prevent “lying flat”, so as to address the contradiction between “lying flat” at work and the growing demand for mental health services.

1.3 Research objectives

The existence of the “lying flat” work state has a negative impact on hospitals’ high-quality

development, service capacity improvement, discipline development, and management costs, and may even pose serious potential risks to medical quality and safety. Physicians “lying flat” at work are unwilling to enhance their professional competence, show little interest in hospital accreditation and development initiatives, and lack motivation to achieve organizational goals. If such a situation persists, it will severely hinder the sustainable development of hospitals, ultimately compromising the health interests of the public.

This study aims to explore in depth the factors associated with the formation of the “lying flat” work state and to identify effective measures to address this problem, thereby providing references for enhancing the service capacity and scientific management of primary-level psychiatric hospitals. Specifically, drawing on the COR theory and the JD-R theory, this study employs a questionnaire survey to assess the current status and extent of the “lying flat” work state among primary-level psychiatrists, identify which factors within job demands and job resources are related to the formation of “lying flat”, explore how these factors interact, and examine the relationship between burnout and “lying flat”.

The specific objectives of this study include the following: 1) To analyze the relationships between job resources (e.g. perceived organizational support, work autonomy), reduced personal accomplishment, and “lying flat” at work. 2) To identify the role of job demands in job resources’ influence on “lying flat”. More specifically, this study examines the moderating effects of patient threats and violence, workload, and role conflict as job demands on the relationships among job resources, burnout, and “lying flat”. Based on empirical findings, this study will propose specific countermeasures and managerial recommendations to prevent and reduce the occurrence of “lying flat”, thereby enhancing psychiatrists’ work engagement. 3) To fill the research gap of lying flat research by conceptualising “lying flat at work” from the COR theory. By so doing, this study contributes to the literature by defining “lying flat at work” as a theoretical construct for future study.

This study is expected to provide a theoretical basis and decision-making reference for implementing targeted measures in management practice, with the aim of minimizing the formation of “lying flat” and mitigating its negative impact on hospital operation and management. It will inform on how to build a workforce consisting of highly qualified professionals who are proactive, optimistic, dedicated, and willing to embrace challenges, providing a solid foundation for improving hospital management and promoting the high-quality development of the healthcare sector, ensuring that the public enjoys higher-quality healthcare services.

1.4 Research questions

This study adopts an empirical research method using a questionnaire survey. Drawing on the COR theory and the JD-R theory, we conducted a qualitative analysis of the measurement scales for burnout and the “lying flat” work state through a literature review. Based on that, a questionnaire survey was administered to a sample of primary-level psychiatrists. Their burnout and “lying flat” work state were measured using the scales determined in the qualitative phase. Finally, a model of the factors associated with “lying flat” among this population was constructed.

This study addresses the following research questions (RQs):

RQ 1: How do job resources and reduced personal accomplishment shape “lying flat”? In other words, from the perspective of the JD-R theory, how do job resources influence burnout, thus further affecting “lying flat”?

RQ 2: How do job demands moderate the path from job resources to and “lying flat”? Specifically, how do patient threats and violence, workload, and role conflict, as forms of job demands, moderate the relationships among job resources, reduced personal accomplishment, and “lying flat”? Currently, few studies have examined these variables as moderators between job resources, burnout, and “lying flat”, highlighting the novelty of this study. The results are expected to provide empirical evidence for developing effective interventions to address the “lying flat” work state.

RQ 3: How can “lying flat at work” be theoretically conceptualized? By testing our hypothesized model, we may provide empirical evidence for the theoretical conceputlization of “lying flat at work” from the COR theory.

1.5 Research methods

This study employs the questionnaire survey method. This method is suitable for large-scale quantitative research, as it allows the collection of substantial amounts of data that can then be processed using statistical techniques for quantitative analysis. Another important component of this study is to explore, based on the JD-R theory, the relationships between the factors within job demands and resources and burnout among primary-level psychiatrists, as well as to examine whether and to what extent burnout influences the formation of “lying flat” work state as a mediator. The purpose of the questionnaire survey is to collect data on these variables and to examine the relationships among them, thereby providing empirical data for hypothesis

testing. There are established measurement scales for job demands, job resources, burnout, and “lying flat”, which provide a reference for the questionnaire design, making the questionnaire survey a suitable empirical research method. Considering the feasibility of survey implementation, we selected 12 primary-level psychiatric hospitals in Chongqing City as the survey sites. The respondents are psychiatrists from these 12 hospitals, forming a sample of sufficient size and with representativeness. Specialized software was used to perform statistical analysis, including analysis of variance (ANOVA), descriptive statistics, and structural equation modeling (SEM), to examine the theoretical model and test the hypotheses proposed in the study.

1.6 Thesis structure

Based on the above research framework, the chapters of this thesis are as follows.

Chapter One: Introduction. This chapter mainly introduces the theoretical background and the practical management problems related to the “lying flat” work state. It also clarifies the research objectives and presents the methods employed. In particular, it provides a detailed explanation of the research problem, emphasizing that while the healthcare sector urgently needs a high-quality psychiatric workforce, the widespread phenomenon of “lying flat” has become a major problem. Centering on this research problem, this chapter proposes the core research questions.

Chapter Two: Literature Review. This chapter provides a systematic review of studies on burnout and the JD-R theory. It summarizes previous research findings concerning the antecedents, moderators, and outcome variables of burnout and “lying flat”, and explores in depth the relevant theoretical models, thereby constructing the theoretical analytical framework for this study. Based on the literature review and drawing on the JD-R theory, the chapter proposes hypotheses regarding the formation of “lying flat” and the associated factors, which are subsequently tested through empirical research.

Chapter Three: Research Methods and Methodology. This chapter focuses on the operationalization of the concepts of “lying flat”, burnout, job demands, and job resources, explaining how the questionnaire was developed based on relevant measurement scales. It presents the sampling method, survey procedure, and data collection and processing method. This chapter also includes reliability testing, validity testing, and common method bias analysis on the collected data.

Chapter Four: Results. This chapter reports the results of statistical analysis, including

descriptive analysis, ANOVA, and hypothesis testing results.

Chapter Five: Discussion and Conclusions. This chapter interprets the findings of this study by comparing them with previous findings, highlighting the theoretical and practical significance of this study. Finally, this chapter summarizes the main contributions and innovations of the study, recognizes its limitations, and proposes directions for future research, providing suggestions to further advance research in this area.

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Chapter 2: Literature Review

This chapter, by reviewing relevant literature, outlines the concepts of burnout and “lying flat”, their respective influencing factors, and the relationship between burnout and “lying flat”. It also elaborates on the conservation of resources (COR) theory and the job demands-resources (JD-R) theory, as well as their applications in the research on burnout and “lying flat”. Drawing on these theories, this chapter proposes hypotheses regarding the relationships among job demands, job resources, burnout, and “lying flat” among primary-level psychiatrists.

2.1 Job demands-resources (JD-R) theory

The JD-R theory is an essential framework for studying work stress and burnout. It can be used to analyze how job characteristics affect individuals’ levels of exhaustion and their coping strategies (Demerouti et al., 2001).

2.1.1 Origin and development

In the late 20th century, globalization, intensified competition, increased work intensity, and accelerated organizational change made workplace stress a central topic of academic research. To systematically explain how job characteristics influence employees’ physical and mental health as well as organizational performance, scholars developed a series of theoretical models, such as the job demand-control (JDC) model and the demand-control-support (DCS) model. Although these classical models contributed significantly within specific domains, they also exhibited notable limitations to varying degrees, which eventually led to the emergence of a more comprehensive and explanatory framework, namely, the JD-R theory.

The JDC model was the pioneering framework in the field of work stress research. Based on the core logic that work stress originates from an imbalance between environmental demands and individual coping capacities, this model divides job characteristics into two core constructs: job demands and job control. Specifically, job demands refer to aspects of the job that require sustained physical or psychological effort, which are essentially stressors that deplete individual resources; job control refers to an individual’s autonomy in making decisions about work content, pace, and methods, which is essentially a resource for individuals to cope with stress

(Karasek, 1979). The core assumption of the JDC model is that the interaction between job demands and job control determines employees' stress levels. Specifically, high demands and low control in a work environment are considered typical representations of "high strain jobs". In such situations, employees face intense demands while lacking the ability to self-regulate. Over time, it causes continuous resource depletion, further leading to the occurrence of psychological stress (e.g., anxiety and burnout) and physical health problems (Karasek, 1979). Conversely, conditions of high demands and high control may alleviate stress by enhancing individual skills and sense of achievement, and may even foster positive adaptation effects (Karasek, 1979). The major contribution of the JDC model lies in its clear conceptualization of job characteristics as having a dual "stress-resource" nature and in its introduction of interaction effects, which overcame the limitations of earlier single-stressor models. However, the limitations of the JDC model are also evident. First, it focuses only on the health impairment process, emphasizing the negative outcomes of job characteristics, with a lack of explanatory power for the positive outcomes. Second, it has a narrow range of core variables. "Job control" focuses solely on individual-level decision autonomy and does not include essential contextual resources such as social support and organizational justice. Third, empirical findings are divided. Subsequent studies found that the buffering effect of job control was not generally applicable; in some contexts, high job control might even exacerbate stress caused by high job demands (Van der Doef & Maes, 1999).

To address the limitations of the JDC model in terms of the neglect of social resources, scholars further incorporated the dimension of social support and developed the DCS model. Social support was defined as emotional and instrumental support (e.g., information or resource assistance) provided by colleagues, supervisors, or the organization, whose primary function is to supplement individual resources and enhance their ability to cope with stress (J. V. Johnson & Hall, 1988). The innovation of the DCS model lies in extending the concept of resources from "individual control" to "social interaction" by adding social support, thus forming a three-dimensional framework of "demand-control-support". This model hypothesizes that social support can buffer the negative effects of job demands independently or jointly with job control; even in low-control contexts, high social support can still mitigate stress levels (J. V. Johnson et al., 1996). For instance, emotional support from supervisors can relieve employees' anxiety caused by time pressure, while instrumental support from colleagues can help improve task completion efficiency, indirectly mitigating resource depletion (J. V. Johnson et al., 1996). Despite the expansion of the connotation of resources, the DCS model is essentially an extension of the JDC model, remaining centered on the health impairment process, with a focus

on the moderating effect of social support on the relationship between stress and health outcomes, without explaining positive outcomes such as employees' work motivation and engagement. Moreover, the definition of "social support" is limited to the interpersonal level and does not encompass structural resources on the organizational level (e.g., career development opportunities and organizational justice), with incomplete coverage of resource dimensions.

Unlike the JDC and DCS models, which focus on the stress-health pathway, the later-developed job characteristics model (JCM) shifted attention to how job characteristics stimulate intrinsic motivation, initiating the motivation-performance theoretical paradigm. The core argument of the JCM is that core job dimensions indirectly stimulate intrinsic motivation by influencing critical psychological states, thereby leading to beneficial personal and work outcomes. The five core job dimensions include skill variety, task identity, task significance, autonomy, and feedback (Hackman & Oldham, 1976). These characteristics operate through three psychological pathways: skill variety, task identity, and task significance jointly promote experienced meaningfulness of the work; autonomy enhances experienced responsibility for the outcomes of work; and feedback facilitates knowledge of the results of the work activities. Ultimately, these three critical psychological states foster intrinsic motivation, leading to higher job satisfaction and performance while reducing absenteeism and turnover intention (Hackman & Oldham, 1980). The JCM's contribution lies in its systematic explanation of the effect of job design on employees' intrinsic motivation, providing a theoretical reference for organizations to enhance employee initiative through improvement in job characteristics. However, its limitations are also prominent. First, it neglects the stress-health pathway and does not consider the potential depletion effects of core job dimensions on employees (e.g., high task significance may entail high responsibility pressure). Second, a limited range of core variables. It restricts its focus to five predefined "core characteristics", excluding key stressors such as job demands (e.g., time pressure). Third, it insufficiently accounts for individual differences. Although it introduces "growth need strength" as a moderator, it overlooks the effect of resource differences (e.g., social support) on the motivational process.

While these classical models have advanced theoretical development within specific domains, they share common limitations. The JDC and DCS models focus exclusively on how job characteristics negatively influence health outcomes through resource depletion, whereas the JCM focuses only on the positive outcomes through the motivational process. These models fail to integrate both processes into a dual-path framework of stress and motivation. In addition, their conceptualizations of "job characteristics" are limited to certain dimensions and fail to

encompass broader work-related stressors and resources, such as role conflict and organizational support. Moreover, they cannot adequately explain how the same job characteristic can simultaneously produce positive and negative outcomes through different mechanisms. For instance, high autonomy may both enhance motivation and increase burnout through responsibility pressure. It was against this backdrop that the JD-R theory emerged, aiming to overcome the limitations of classical models. Its core purpose is to provide an integrated and heuristic framework capable of explaining how various job characteristics lead to diverse aspects of employee outcomes through two relatively independent psychological processes: the health impairment process and the motivational process (Bakker & Demerouti, 2007, 2017; Demerouti et al., 2001). The development of the JD-R theory marked a paradigm shift in job design research from focusing on single dimensions or limited interactions to adopting a systemic perspective with increased comprehensiveness and flexibility.

2.1.2 Core arguments and key hypotheses of the JD-R theory

The JD-R theory was developed based on survey data from blue-collar and white-collar workers. The core structure of the JD-R model emphasizes the systematic influence of two core elements in the work environment, namely, job demands and job resources, on employees’ psychological and behavioral outcomes (Demerouti et al., 2001).

2.1.2.1 Flexibility of the JD-R theory

Unlike classical job design theories, such as the JCM, which emphasizes a fixed set of job dimensions, the main advantage of the JD-R theory lies in its flexibility. The JD-R theory does not presuppose universal “core job dimensions” but instead recognizes that different organizations, occupations, and work contexts possess distinctive characteristics and that the composition of job demands and job resources may vary significantly across contexts (Bakker & Demerouti, 2007). Accordingly, the JD-R theory defines the two core concepts, job demands and job resources, as follows.

Job demands refer to the physical, psychological, emotional, or cognitive aspects of the job that require individuals’ sustained physical or mental effort and are therefore associated with certain physiological or psychological costs, which can lead to physical or mental strain, often imposing substantial stress to employess, negatively affecting their physical and mental health (Demerouti et al., 2001; Xiaoyan Jiang, 2018). In essence, job demands are burdensome factors that individuals must continuously cope with in their work, typically including high workload, time pressure, role conflict, emotional labor (e.g., suppressing genuine emotions to meet

customer needs in the service industry), job insecurity, and work-family conflict. Prolonged exposure to high job demands can lead to the excessive energy depletion of an individual, resulting in negative outcomes (Bakker & Demerouti, 2017). In a later study on the JD-R model, factors such as work overload, emotional demands, physical demands, and work-home interference were considered as major components of job demands (Bakker et al., 2005; Xiaoyan Jiang, 2018). High job demands have been shown to increase emotional exhaustion among physicians and nurses, which further leads to “lying flat” at work, manifested by reduced patient interaction and indifference toward work tasks (Van Den Tooren & De Jonge, 2008; Van der Heijden et al., 2017).

A major development in the JD-R theory concerns the refined classification of job demands, particularly the distinction between challenge demands and hindrance demands, which provides a valuable framework for understanding the heterogeneity of stressors (J. A. LePine et al., 2005). Meta-analyses have demonstrated that although both types of demands represent straining stressors (Podsakoff et al., 2007), hindrance demands (e.g., role conflict) directly impair health by obstructing goal attainment, whereas challenge demands (e.g., job complexity or skill development tasks) can indirectly enhance motivation through opportunities for growth, only leading to exhaustion when demands become excessive or prolonged (M. A. LePine, 2022). Nevertheless, the stability of this distinction and its boundary conditions remain debated. First, individual differences in subjective perception significantly influence classification validity. The same job characteristic (e.g., high workload) may be perceived as either a challenge or a hindrance depending on an individual’s abilities and values (Bakker & Demerouti, 2024). For example, among nurses, work stress is more likely to be perceived as a hindrance demand, while emotional demands (e.g., patient communication) are often regarded as challenge demands. In addition, different perceptions moderate the effects of personal resources (e.g., self-efficacy): hindrance perception weakens the positive effects of resources on well-being, while challenge perception accentuates the effect of resources in enhancing work engagement (Bakker et al., 2023; Bakker & Sanz-Vergel, 2013). Second, contextual factors such as leadership style can reshape the influence path of job demands (Bakker et al., 2023). Transformational leadership, by providing meaningfulness of work and support, can strengthen the positive relationship between challenge demands and work engagement; in contrast, under transactional leadership, hindrance demands such as role ambiguity have enhanced negative effects on work engagement. These findings indicate that the “nature” of job demands is not fixed but rather is constructed through the interaction between individuals and the context. Thus, the classification of job demands should consider both subjective perceptions and objective characteristics (Bakker &

Demerouti, 2024).

Job resources refer to the physical, psychological, organizational, and social aspects of the job that help individuals achieve work goals, reduce job demands and the associated physiological and psychological costs, and stimulate personal growth, learning, and development. Research on job resources originated from the JDC model, which first identified job control (e.g., skill discretion and decision authority) as the core component of job resources and suggested that it could buffer the impact of job demands on stress (Karasek, 1979). The model was later expanded into the DCS model, incorporating social support as an additional key job resource, leading to the early two-dimensional structure of job resources: autonomy and social support (Karasek & Theorell, 1990). Job resources, like job demands, are characterized by openness, that is, any instrumental factor that helps individuals achieve work goals can be conceptualized as a job resource. Typical examples of job resources include social support, work autonomy, feedback, skill variety, opportunities for career development, job security, and working conditions (Bakker et al., 2014; Demerouti et al., 2001; Xiaoyan Jiang, 2018).

2.1.2.2 The health impairment and motivational processes

The JD-R theory explains the influence of job demands and job resources on employee outcomes through two core mechanisms: the health impairment process (health path) and the motivational process (motivational path). Job demands have been shown to be significantly positively associated with the dimensions of burnout, including emotional exhaustion, depersonalization, and reduced personal accomplishment (Lee & Ashforth, 1996). Job resources (e.g., work autonomy and social support) were found to be significantly related to burnout, as well as with the phenomenon of “lying flat”. The dual-process hypothesis of the JD-R model posits that the two core categories of job characteristics, namely, job demands and job resources, influence employee outcomes through two different processes: health impairment and motivational processes.

A. Health impairment process

The health impairment process focuses on the negative effects of job demands on individual health and well-being. High job demands continuously deplete individuals’ physical, emotional, or cognitive energy, leading to exhaustion and eventually resulting in burnout or health problems (Demerouti et al., 2001). This process has an enduring effect: when individuals are exposed to prolonged high cognitive load tasks (e.g., complex decision-making) or constant environmental stimuli (e.g., large volumes of emails), short-term fatigue can develop into chronic energy depletion, even inducing health risks, such as cardiovascular disease, anxiety,

or depression (Bakker & Demerouti, 2017). In the health impairment process, high job demands keep employees in a state of persistent fatigue, which gradually leads to emotional exhaustion (Xiaoyan Jiang, 2018). Such prolonged physical and psychological depletion impairs employees’ health, causes burnout, and may eventually result in a “lying flat” state. When job demands are high, the positive effect of job resources on work engagement is weakened. For example, with a heavy workload, even employees with decision-making autonomy may be unable to effectively utilize their resources due to energy depletion. In such cases, the “resource depletion effect” of job demands dominates, suppressing the positive influence of resources (Bakker & Demerouti, 2017). Research in the healthcare sector showed that for every 1 SD increase in emotional demands (a type of job demands), the risk of burnout among healthcare professionals increased by 37%, directly confirming the driving effect of job demands on burnout (Bakker et al., 2005).

B. Motivational process

The motivational process focuses on how job resources foster individuals’ positive behavioral outcomes. Job resources motivate work engagement (i.e., a positive psychological state characterized by vigor, dedication, and absorption) by satisfying individuals’ basic psychological needs (e.g., autonomy, competence, and belongingness), thus leading to positive outcomes such as enhanced job performance, organizational commitment, and organizational citizenship behavior (Hakanen et al., 2008). Specifically, job resources (e.g., work autonomy, skill development opportunities, and social support) can directly satisfy the three basic psychological needs identified in the self-determination theory (SDT): the needs for autonomy, competence, and belongingness (Van den Broeck et al., 2008). The satisfaction of these needs further stimulates intrinsic motivation, prompting individuals to invest sustained effort toward achieving professional goals, ultimately leading to improved job performance (Bakker et al., 2023). A longitudinal study on employees in the service industry found that a 10% increase in work autonomy was significantly associated with a 15% increase in the level of work engagement, and through the mediating effect of work engagement, it indirectly improved customer satisfaction by 9%, validiting the motivational process (Xanthopoulou et al., 2009a). Conversely, insufficient job resources can weaken employees’ work motivation, making them gradually lose enthusiasm at both psychological and emotional levels. This detachment reduces their sense of accomplishment and may lead to “lying flat”. In summary, the JD-R theory explains how different job characteristics affect employees’ psychological and behavioral outcomes through distinct pathways (Demerouti et al., 2001).

A substantial body of research has validated the two processes in the JD-R model (Hobfoll

& Shirom, 2000). Job demands have been found to be strongly associated with burnout. For instance, among hospital and community mental health professionals, job demands were found to be significantly related to emotional exhaustion and depersonalization, the two key components of burnout (Lasalvia et al., 2009), thereby significantly increasing the risk of burnout (Glasberg et al., 2007; Prosser et al., 1996). The burnout symptoms would further lead to “lying flat” among physicians and nurses (Sodeke-Gregson et al., 2013; Van der Heijden et al., 2008). Job resources, on the other hand, were found to be negatively associated with the two dimensions of burnout, namely, emotional exhaustion and depersonalization, but positively related to personal accomplishment (Lee & Ashforth, 1996). Increasing job resources can significantly enhance healthcare professionals’ work engagement and sense of accomplishment while reducing burnout and “lying flat” (Denning et al., 2021; Van Bogaert et al., 2014; Yousef et al., 2024). Job resources such as autonomy, supervisor support, social support, team cohesion, and rewards can significantly reduce burnout and “lying flat” while enhancing employee engagement and job satisfaction (Thapa et al., 2022). Mental health professionals (e.g., psychiatrists) who lack organizational support (e.g., supervisor support and team cohesion), career development opportunities, and effective feedback are more prone to emotional exhaustion and depersonalization, which can lead to “lying flat” (Kumar, 2007; O’Connor et al., 2018). The lack of job resources increases physicians’ emotional exhaustion, reduces their sense of accomplishment and work engagement (Prins et al., 2010), gradually leading to “lying flat” (Glasberg et al., 2007). Similarly, nurses who lack psychological support, peer collaboration, and career development opportunities are more likely to experience emotional detachment and develop defensive coping strategies in stressful work environments, resulting in “lying flat” (Yousef et al., 2024).

In summary, job resources influence individuals’ future levels of work engagement and can thus predict the degree of lying flat, while job demands can predict the level of burnout (Xiaoyan Jiang, 2018). Job demands were found to be significantly positively associated with burnout, such that the higher the job demands, the greater the likelihood of burnout. Conversely, job resources were found to be significantly positively associated with work engagement: the greater the job resources, the higher the level of engagement, and consequently, the lower the level of “lying flat” (Crawford et al., 2010; Hakanen et al., 2008).

2.1.2.3 The buffer hypothesis and the boost hypothesis

A. The buffer hypothesis

Besides being significantly positively associated with employee work engagement, job

resources can also mitigate the negative effects of job demands on employees, which is referred to as the “buffer hypothesis”. The buffer hypothesis posits that sufficient job resources act as a “buffer” to mitigate the energy depletion effect of high job demands on individuals, thereby lowering the risk of burnout (Demerouti et al., 2001). In other words, job resources moderate the relationship between job demands and burnout, such that the greater the resources, the weaker the positive relationship between high job demands and burnout. The findings of a large body of studies have supported the buffering effect of job resources on the negative effects of job demands within the JD-R model. The balance between job demands and job resources is essential for employees’ mental health and job performance. Job resources not only can reduce the stress and other negative outcomes caused by job demands but also promote employees’ work engagement and positive emotions, thereby enhancing their overall job performance and satisfaction (Bakker & Demerouti, 2007, 2014).

A study of stressful IT teams revealed that, in conditions of the same workload (job demands), team members who received high social support (job resources) experienced a 52% lower incidence of burnout compared with those who received low social support, indicating that social support effectively buffered the negative impact of high job demands (Demerouti & Bakker, 2011). In addition, job resources such as work autonomy and social support were found to effectively moderate the relationship between job demands (e.g., emotional demands and workload) and burnout (Xiaoyan Jiang, 2018), thereby reducing the risk of burnout (Xanthopoulou et al., 2007). Approximately 88% of studies on the interaction effects between job demands and job resources reported statistically significant results (Bakker et al., 2010; Xiaoyan Jiang, 2018). In hospitals, job resources such as supervisor support, team cohesion, and autonomy were found to significantly mitigate the effect of workload in inducing “lying flat” (Fernet et al., 2013). High job demands were found to be strongly associated with burnout and mental health problems, whereas sufficient job resources were found to contribute to improved job satisfaction and mental well-being among nurses (Thapa et al., 2022). High job demands were significantly associated with burnout and “lying flat”, whereas job resources could buffer these negative effects and increase employee engagement (Hakanen et al., 2008). Moreover, the interaction between job demands and job resources was found to influence both burnout and “lying flat” (González-Romá et al., 2006).

B. The boost hypothesis

This hypothesis posis that challenge job demands can enhance the positive impact of job resources on work engagement. Challenge job demands can be transformed into “motivational demands”, enabling employees to derive greater benefits from job resources such as

performance feedback and peer support (Bakker, 2011). The combination of job demands and job resources can amplify the positive effects on work engagement and performance: in high-demand environments, employees are better positioned to effectively utilize abundant job resources to achieve high levels of job performance – this phenomenon is also referred to as the "coping" hypothesis in the JD-R model. Under such conditions, employees are more proactive in engaging in tasks, making the maximum use of available job resources to achieve goals, which in turn, enables them to acquire additional resources. Jobs characterized by high demands and high resources are referred to as active jobs, which stimulate individuals to learn new knowledge and adopt innovative behaviors at work (Xiaoyan Jiang, 2018; Karasek, 1979). Job resources provide support to individuals in coping with high demands, while high demands motivate individuals to use resources more effectively, thus creating a positive "high-demands – high-resources" interaction. When employees work under time pressure to complete tasks, their performance often improves. In other words, when faced with high job demands, employees make better use of available job resources and concentrate more on their work, contributing to the achievement of their goals.

A large body of research supported this hypothesis, demonstrating that in high job demand environments, high levels of job resources showed a more significant positive effect on employees' job performance and related outcome variables (Lewig et al., 2007). This finding aligns with the argument in the conservation of resources (COR) theory, that is, individuals' various job resources can stimulate their motivation, which becomes particularly valuable when needed (Hobfoll & Shirom, 2000). When job demands are excessively high, the lack of job resources is a significant predictor of individuals' reduced work engagement (Hakanen et al., 2006). Research on designers found that when high creative demands (job demands) coexisted with high autonomy (job resources), designers' innovation performance was 40% higher compared with those in "low creative demands – high autonomy" or "high creative demands – low autonomy" groups. This indicates that when resources are sufficient, high demands can serve as a "booster" for engagement and performance (Bakker, 2011).

Inspired by the positive function of high job demands in the boost hypothesis, scholars further categorized job demands into hindrance demands and challenge demands. The traditional JD-R model posits that job demands (e.g., workload and time pressure) inevitably deplete resources and cause health impairment, while job resources (e.g., autonomy and organizational support) promote motivation. Although job demands play a key role in the health impairment process, they were traditionally not considered to influence the motivational process. Within the JD-R model, job demands are defined as the aspects of the job that require

sustained effort, which involve physiological and psychological costs. Research distinguishing between challenge and hindrance demands suggests that although challenge demands require effort, they can promote personal growth, while hindrance demands may hinder goal achievement and cause frustration. Thus, job demands also play a role in the motivational process, and these two types of job demands may have distinctive effects on employees (J. A. LePine et al., 2005). Hindrance job demands are defined as excessive or unwanted constraints, or demands/environments that interfere with or hinder the attainment of individuals' valued goals (Cavanaugh et al., 2000). Examples of hindrance job demands include role conflict, role overload, and role ambiguity (Podsakoff et al., 2007). In contrast, challenge job demands refer to tasks that require effort but can foster personal development and success. Examples include high workload, time pressure, and responsibility (McCauley et al., 1994). These demands are often viewed as valuable work experiences despite causing discomfort and are thus considered "positive" stressors. A study showed that when weekly hindrance demands were low, individuals' confidence and positive emotions were positively associated with high work engagement, and their self-efficacy and optimism were also positively associated with engagement; when weekly challenge demands were high, individuals' self-efficacy and optimism were positively associated with work engagement (Bakker & Sanz-Vergel, 2013; Xiaoyan Jiang, 2018). However, studies have also shown that in different contexts, challenge demands may be perceived as hindrance demands and vice versa. In addition, some scholars have found that certain job demands can simultaneously possess both challenging and hindering characteristics (Searle & Auton, 2015).

2.1.2.4 Interaction between personal resources and job resources

Personal resources. As the JD-R theory has evolved, and personal resources has gained increasing attention from scholars and has been integrated into the latest version of the JD-R model. The concept of personal resources was first proposed by Hobfoll (1989) in his COR theory. According to the COR theory, personal resources are defined as individuals' positive evaluations of their ability to effectively control their environment and achieve their goals. It encompasses dimensions such as self-efficacy, optimism, and stress resistance (Hobfoll, 1989).

Personal resources can be divided into two categories: general and specific. General resources include physical, social, cognitive, and psychological assets, while specific resources are closely related to psychological resilience, emphasizing positive self-perceptions and individuals' understanding of their ability to control and adjust to environmental conditions (Hobfoll, 1989).

Within the JD-R model, personal resources are closely related to psychological resilience, reflecting an individual's confidence in their ability to control their environment. Individuals with high optimism and self-efficacy tend to believe that more positive experiences await them in the future and that they are capable of coping with uncertainties in life. In the JD-R model, personal resources such as optimism and self-efficacy play a role similar to that of job resources. Personal resources not only significantly enhance individuals' work engagement but also buffer the negative effects of challenges at work (Bakker et al., 2023). Furthermore, personal resources can enhance the positive impact of job demands on individuals' work motivation (Bakker, 2011; Bakker & Demerouti, 2007). They provide both physiological and psychological support and motivation for individuals to fully engage in their work (Xanthopoulou et al., 2009b). Empirical studies have demonstrated the positive effect of personal resources on work engagement (Dikkers et al., 2010). In addition, to certain extent, personal resources can moderate the impact of job demands on stress, such that when personal resource levels are high, this impact is significantly weakened (Tremblay & Messervey, 2011).

Research showed that when individuals faced high emotional demands and dissonance, self-efficacy was positively associated with work engagement, whereas optimism did not exhibit a positive relationship with work engagement (Xanthopoulou et al., 2013). Furthermore, personal resources and job resources (e.g., social support and task autonomy) have a mutually reinforcing relationship: individuals with higher self-efficacy are more capable of identifying and acquiring job resources, while sufficient job resources can foster personal resources, forming a "gain spiral of resources" (Bakker & Demerouti, 2017). When employees possess high levels of optimism and self-efficacy, they are more likely to perceive emotional demands (e.g., high emotion-consuming interactions with patients in healthcare settings) as manageable challenges, thus maintaining or even increasing their work engagement; conversely, when personal resources are insufficient, the same demands are more likely to be perceived as stressors, resulting in a significant decline in work engagement (Bakker & Leiter, 2010; Bakker & Sanz-Vergel, 2013). For example, an experience sampling study of nurses showed that under high emotional demands, those with high levels of self-efficacy and optimism exhibited a 17.3% increase in work engagement, whereas those with low levels of personal resources showed an 11.2% decrease (Bakker et al., 2004).

Job crafting. The JD-R theory also suggests that employees can proactively adjust their job design to optimize their job demands and job resources through the process of job crafting. Job crafting is defined as the continuous process by which employees adjust task boundaries, restructure interpersonal relationships, or reframe cognitive stance to improve the fit between

job demands and their abilities (Wrzesniewski & Dutton, 2001). Subsequent studies identified three core strategies of job crafting: task revision, personal relationship crafting, and feedback seeking (Tims et al., 2013). A meta-analysis indicated that job crafting significantly increased meaningfulness of work and work engagement by enhancing person-job fit (Tims et al., 2016). These studies also demonstrated that job resources and work engagement might facilitate proactive work behaviors, and work engagement, in turn, could create a positive feedback loop: proactive behaviors could continuously generate additional resources and further enhance engagement (Bakker & Xanthopoulou, 2009). Thus, the JD-R theory continues to evolve around the finding that “job demands and resources not only influence outcomes, but these outcomes can also predict future job demands and resources”.

2.1.3 The innovative evolution of the JD-R theory – A new perspective on theoretical integration

Since its introduction in 2001, the JD-R theory has rapidly established itself as one of the most influential and central frameworks in the field of occupational stress and occupational health psychology, owing to its concise yet insightful theoretical connotation. However, in response to rapidly changing work environments (e.g., digital transformation), fundamental shifts in workforce structure, and the multifaceted challenges posed by social and environmental emergencies, the JD-R theory has not remained static. Instead, it has demonstrated remarkable vitality and adaptability. In recent years, this theory has made significant advances in four key areas: the depth of theoretical integration, the breadth of construct expansion, methodological improvement, and the promotion of practical applications. Among these, the innovation in theoretical integration has been particularly prominent. Current research has shifted from the isolated application of the JD-R model to the pursuit of deep integration with other classical theories and emerging perspectives, with the goal of achieving a more precise and dynamic understanding of the mechanisms underlying work stress formation and motivational processes.

2.1.3.1 Compatibility with the COR theory

The COR theory, proposed by Hobfoll in 1989, centers on two key principles: 1) the “primacy of resource loss”, which states that the distress caused by resource loss outweighs the satisfaction derived from equivalent resource gains; and 2) the “the expectation of return from investment of resources”, which posits that individuals are motivated to invest resources to prevent resource losses or to acquire new resources (Hobfoll, 1989). These core propositions are highly aligned with the health impairment process of the JD-R theory, providing a solid

theoretical foundation for understanding how job demands lead to negative outcomes such as burnout by depleting resources.

Studies in recent years have further revealed the complex dynamic cycles of resources within the JD-R framework. The concept of the “resource gain spiral” demonstrates that when individuals perceive an abundance of job resources (e.g., strong leadership support) that effectively meet their job demands, these resources not only can buffer the stress induced by job demands but also enhance individuals’ intrinsic motivation, which will drive them to invest greater effort in acquiring and accumulating additional resources (e.g., improved professional competence and psychological resilience). This positive feedback loop will ultimately result in personal growth and improved performance (Bakker et al., 2014). For instance, when organizations provide employees with continuous training opportunities and mentorship, employees’ sense of competence will increase, prompting them to proactively take on more challenging tasks. Successfully completing these tasks further enhances their capabilities and professional recognition, thus forming a virtuous cycle. Conversely, the “resource loss spiral” demonstrates that when individuals are exposed to prolonged, high-intensity job demands (e.g., persistent time pressure and excessive workload) without sufficient resource support, it will result in continuous depletion of key resources (e.g., energy, emotions, and time). This resource depletion will, in turn, weaken individuals’ capability of coping with job demands, making it increasingly difficult to obtain new resources. Consequently, this leads to a risk of further resource loss, forming a vicious cycle (Halbesleben et al., 2014).

2.1.3.2 Organic integration with SDT

Self-determination theory (SDT), proposed by Deci and Ryan (1985, 2000), posits that autonomy, competence, and belongingness are universal basic psychological needs that influence humans’ intrinsic motivation and psychological well-being. In recent years, research on the JD-R theory has increasingly incorporated SDT’s framework of basic psychological needs, viewing it as a key mediating mechanism that links job resources with the motivational process, providing a deeper understanding of how resources stimulate intrinsic motivation by satisfying psychological needs. Specifically, when job resources in the work environment can effectively satisfy employees’ needs for autonomy, competence, and belongingness, employees are more likely to have their intrinsic motivation activated, resulting in higher levels of work engagement, job satisfaction, and performance (Gagné & Deci, 2005).

2.1.3.3 Cross-integration with positive psychology

Traditional JD-R research has mainly focused on how job demands lead to negative outcomes, such as stress and burnout, and how job resources buffer these negative outcomes. In recent years, influenced by the development of positive psychology, the JD-R theory has expanded its perspective to explore how job resources promote individuals' positive psychological states and career development, leading to the incorporation of positive outcome variables such as occupational well-being (Bakker & Oerlemans, 2011) and work flourishing (Spreitzer et al., 2005) into the theoretical framework. This shift has encouraged researchers to investigate how job resources enhance and sustain employees' positive work states by fostering their "psychological capital" (i.e., positive psychological states such as hope, efficacy, resilience, and optimism) (Luthans et al., 2007).

2.1.4 Expasion and unresolved questions

Recently, the JD-R theory has been further expanded to incorporate the effects of crises into its theoretical framework (Demerouti & Bakker, 2023), leaving a series of unresolved questions that await empirical validation, such as whether job demands moderate the relationship between job resources and work engagement (Bakker & Demerouti, 2024). The extended theory posits that employees' health impairment results not only from excessive or poorly designed job demands but also from the interactions among organizational, family, and personal demands. Similarly, the generation of work motivation not only relies on high levels of job resources but also on the synergistic effects of organizational, family, and personal resources. In addition, the proposed buffering and boosting mechanisms have been extended to various life domains. For instance, job resources may mitigate the negative impact of family demands on health outcomes, whereas family demands may, in turn, accentuate the positive effects of job resources on health outcomes. Moreover, the influence of job demands and resources is not only moderated by individuals' strategies, but also by the strategies adopted by their partners, leaders, and organizations (Demerouti & Bakker, 2023).

2.1.4.1 Cross-domain expansion of the interaction between job demands and resources

In recent years, the explanatory boundaries of the JD-R theory have been significantly expanded to dynamic environments. In particular, its application to crisis contexts (e.g., public health emergencies and economic fluctuations) has advanced this theory in multiple dimensions. By integrating empirical data on employee experiences during COVID-19, the JD-R theory has been extended to include crisis impacts within its conceptual framework, highlighting the

limitations of a traditional workplace-only perspective, emphasizing the intertwined interactions of organizational, family, and personal demands and resources (Demerouti & Bakker, 2023).

The expanded model states that employees’ health impairment arises not only from excessive workload or poor job design but also from the cumulative conflicts in time and energy allocation among organizational task demands (e.g., performance pressure), family responsibility demands (e.g., caregiving burdens), and personal development demands (e.g., skill enhancement) (Bakker & Demerouti, 2024). Similarly, the generation of work motivation also depends on the synergistic interplay among cross-domain resources, such as training opportunities provided by organizations (job resources), emotional support from family (family resources), and self-efficacy (personal resources), which jointly constitute a “resource pool” in the motivational process (Bakker & Demerouti, 2017). This theoretical expansion allows the originally proposed buffering and boosting mechanisms in the JD-R model to transcend the boundaries of the workplace, forming dynamic effects across life domains. For example, social support at work (e.g., coworker collaboration networks) can buffer the physiological health impairment caused by high family demands (e.g., long-term caregiving tasks) through emotional regulation pathways (Bakker & Demerouti, 2024). Conversely, sustained stress induced by family demands may weaken the positive effects of job resources. For example, the positive effect of flexible work arrangements on work engagement is hindered by high family conflict (Demerouti & Bakker, 2023).

Moreover, recent developments in the theory emphasize the diversity of regulatory strategies. Beyond individual-level mechanisms such as time management and emotional regulation, organizational policies (e.g., family-friendly benefits), leadership behaviors (e.g., transformational leadership support), and peer relationships (e.g., peer support mechanisms) also play a role in this process by supplementing resources or adjusting demands (Bakker & Demerouti, 2017). The most recent theoretical developments have also introduced a series of mediating and moderating hypotheses awaiting empirical validation, for instance, the mediating effect of burnout between job demands and task performance, the buffering effect of job resources on the relationship between job demands and stress, and the moderating effect of job demands on the relationship between job resources and work engagement (Bakker & Demerouti, 2024).

2.1.4.2 In-depth exploration of the complex relationship between job resources and burnout

The JD-R theory initially assumed that job demands were primarily associated with the health impairment process, while job resources were mainly linked to the motivational process (Bakker & Demerouti, 2007). However, the meta-analyses in recent years have revealed a significant direct negative relationship between job resources and burnout (Bakker & Demerouti, 2017). This finding has prompted scholars to revisit the role of job resources in the health impairment process. However, this negative relationship might have originated from an indirect motivational transmission. According to the JD-R theory, job resources indirectly reduce burnout by stimulating work engagement (Bakker & Demerouti, 2017). If empirical models fail to control for the sequential mediation "job resources → work engagement → burnout", indirect effects may be misinterpreted as direct effects. In addition, construct validity issues in burnout measurement might have influenced the results. Earlier studies often used composite scales encompassing emotional exhaustion, depersonalization, and reduced personal accomplishment. However, as reduced personal accomplishment was directly related to the motivational attributes of job resources, it might have artificially inflated the observed relationship between job resources and overall burnout scores (M. A. LePine, 2022). Furthermore, methodological limitations might have obscured the true underlying mechanisms. If regression models exclude the interaction term of "job demands × job resources" and inlcude only main effects, the direct influence of job resources on burnout may be overestimated (Bakker et al., 2005). Moreover, insufficient variability in job demands in the sample (e.g., uniformly high demands across the sample) might have weakened interaction effects, making the main effect of job resources appear stronger (M. A. LePine, 2022).

Despite the considerations mentioned above, accumulated evidence suggests that job resources may indeed have a direct effect on health outcomes. For instance, high-quality social resources (e.g., transformational leadership) can reduce cognitive, emotional, and physical stress (Fernet et al., 2015); skill-related resources (e.g., training opportunities) could reduce long-term exhaustion risks by strengthening coping efficacy (Bakker & Demerouti, 2017). Therefore, job resources may play a more direct and complex role in the health impairment process than the original JD-R framework suggested. The specific influencing pathways and the boundary conditions need further exploration in future research.

In summary, the enduring vitality of the JD-R theory lies in its inclusive theoretical structure, which allows for integrating new theoretical perspectives and incorporating additional variables,

continuously enriching its conceptual connotation (Bakker et al., 2014). Its core value does not merely reside in revealing the dual pathways of work stress and motivation but also in articulating that job design is essentially a sophisticated art of energy management, that is, transforming potential energy depletion into sustainable momentum for individual and organizational growth through improved allocation and activation of job resources. The JD-R theory provides profound guidance in broader theoretical integration and practical application. It enables researchers to better explain and predict individuals’ “lying flat” in the workplace and explore its relationships with job demands, job resources, and burnout. Within this framework, researchers can construct specific JD-R models tailored to different research objectives to empirically test their hypotheses.

2.2 Conservation of resources (COR) theory

The COR theory was first proposed by Hobfoll in 1989 as a motivational and stress theory that describes the dynamic interaction between individuals and their social environments through the exchange of resources. It has since become a representative theoretical framework for burnout research (Hobfoll, 1989).

2.2.1 Fundamental viewpoints of the COR theory

The basic assumption of the COR theory can be summarized as follows: individuals tend to protect their existing resources and strive to acquire new ones. These resources, encompassing object, social, personal, and energetic aspects, serve not only to satisfy individuals’ basic needs but also to assist individuals in achieving self-identification and social positioning (Lee & Ashforth, 1996). Within the COR theory, resources are classified into four categories: 1) object resources, which are directly related to an individual’s socioeconomic status and are crucial for coping with stress, such as transportation and housing; 2) conditions refer to external conditions and environmental resources that help individuals achieve goals or carry out activities, including educational opportunities, occupational positions, social network, and public service facilities; 3) energies are sources of power available to individuals for engaging in physical or cognitive activities, including individuals’ physical capacities such as strength and vitality, as well as externally available energies such as electricity and fuel; 4) personal characteristics refer to individuals’ internal, non-material resources, including knowledge reserves, professional skills, health conditions, and psychological qualities, which constitute an essential part of an individual’s core competitiveness (Hobfoll, 1989).

The COR theory proposes two fundamental principles of resource preservation and acquisition. 1) Resource loss is more salient than the gain of an equivalent amount of resources, and preventing resource loss is more difficult than acquiring new resources (Xiaoyan Jiang, 2018). This phenomenon is referred to as the primacy of resource loss. 2) Individuals must invest resources to prevent resource loss or to gain new resources, which is known as the resource investment principle. According to the COR theory, stress experienced by individuals can be understood as the result of potential or actual loss of resources. Individuals must introduce resources to prevent resource depletion; those with a larger pool of resources are less affected by resource losses, while those with fewer resources are more likely to fall into “loss spirals”, that is, a vicious cycle of resource depletion. Individuals with abundant resources are more likely to take risks in order to gain additional resources, leading to “gain spirals”, that is, a virtuous cycle of resource accumulation (Hobfoll & Shirom, 2000). Although resource acquisition has limited effects, it becomes particularly valuable in contexts of resource loss. That means, the motivational potential of job resources is more prominent when employees face high job demands (Hobfoll, 2002).

Initially, the COR theory was primarily applied in stress research, where job stress was often attributed to resource loss (Halbesleben & Buckley, 2004; Hobfoll, 2001). Hobfoll (2001) elaborated on the central role of resources in stress resistance, stating that stress may arise from three situations: when resources are threatened, when resources are actually lost, or when frustration occurs due to resource investment failure. High job demands (e.g., role conflict) force employees to continuously invest resources; when such resources are not replenished in time (for instance, due to a lack of supervisor support), job demands will exacerbate resource depletion, intensifying the relationship between stress and burnout (Hobfoll, 2001). Confidence in one’s abilities and personal life conditions represent psychological personal resources and social resources, respectively. Therefore, employees’ work engagement and the “lying flat” psychological state essentially reflect different psychological conditions experienced by individuals in striving to “retain, protect, and build” resources (Hobfoll, 1989). This insight laid the theoretical foundation for the COR theory.

Subsequently, Hobfoll (2001) further advanced the COR theory by emphasizing the influence of culture and community on the stress process. He pointed out that the norms, values, and availability of resources across different cultures and communities significantly affect how individuals cope with stress. In this process, the impact of resource loss is often more powerful than that of resource gain. This theoretical extension highlighted the critical role of cultural and community contexts in the emergence and resistance of stress, offering new perspectives for

the COR theory’s application (Hobfoll, 2001). In his book *Social and Psychological Resources and Adaptation*, Hobfoll (2002) elaborated in depth on the essential role of social and psychological resources in stress resistance. He emphasized that resources such as social support are valuable in mitigating the impact of stress, and that resource preservation is the core strategy for effective stress resistance. His research further underscored the importance of social and psychological resources in stress adaptation, providing a more comprehensive understanding of stress resistance and particularly highlighting the significance of positive emotions and interpersonal relationships. Subsequent studies demonstrated that various combinations of resources could effectively alleviate organizational stress and explored stress resistance strategies in different contexts. These findings highlighted the complexity of organizational stress and contributed to the development of more effective stress management approaches (Westman et al., 2004).

In later research, Hobfoll (2011a) introduced the concept of “resource caravans”, stating that resources do not exist in isolation but rather interact with each other in the form of clusters. Within organizational contexts, resource caravans play a crucial role in employees’ positive adaptation and engagement. The concept of “resource caravans” enriched the connotation of the COR theory by extending its scope from the individual to the team level. It emphasizes the synergistic effect of organizational resource systems (e.g., leadership support) in regenerating individual resources. Moreover, a team’s psychological safety can strengthen members’ self-efficacy and collectively buffer the negative effects of high job demands (Hobfoll, 2011a).

2.2.2 Application of the COR theory in “lying flat” research

Currently, the COR theory has been widely applied in research on burnout and “lying flat” (disengagement) in the workplace. From the perspective of effort-reward imbalance, this theory explains the mechanisms underlying the development of burnout, stress, and “lying flat” (disengagement). Job demands are considered the primary source of negative emotions such as emotional exhaustion and depersonalization (Lee & Ashforth, 1996), whereas resource-related factors provide individuals with support that helps alleviate the stress caused by such negative emotions (Lazarus & Folkman, 1984). When individuals’ resource investment continuously exceeds their return, and when personal and social resources are insufficient to offset the losses, individuals tend to halt further investment of resources (Hobfoll, 2001). When individuals invest considerable internal resources such as time, energy, opportunities, and social relationships but receive minimal return, they are likely to experience negative outcomes such as burnout and “lying flat” (disengagement) (Brotheridge & Lee, 2002; Buchwald & Hobfoll,

2004). According to the COR theory, individuals need to invest their existing resources to acquire additional ones. As job demands increase, employees must devote more energy to cope with stress; at the same time, the depletion of job resources implies decreased opportunities for future resource acquisition, exposing employees to the threat of resource loss (Xiaoyan Jiang, 2018). Both situations exert immense psychological pressure on employees, draining their internal energy reserves and reducing their motivation to make efforts in gaining more resources, ultimately resulting in burnout and “lying flat”. However, when job demands are challenging (e.g., task complexity) and employees possess sufficient resources, high demands may stimulate employees’ behavior of resource investment and enhance the perceived meaningfulness of work. In such cases, job demands shift from being “stressors” to “growth opportunities”, thereby altering the direction of the relationship between resources and performance.

In addition, job demands influence work outcomes through the moderation of the value and availability of resources. Under resource scarcity, job demands enhance the negative effect of stress; however, with sufficient resources, demands mitigate the impact of stress on work engagement. Nonetheless, certain types of demands (e.g., challenge demands) may enhance the motivational process. Therefore, organizations should distinguish between hindrance demands and challenge demands and allocate corresponding resources to improve management strategies (Crawford et al., 2010). Furthermore, the relationship between demands and resources may be affected by personal and social resources. Personal and social resources can compensate for the loss of job resources, thereby reducing the likelihood of “lying flat”. Conversely, when individuals with limited resources experience further resource loss, the possibility of “lying flat” significantly increases. Ultimately, the “lying flat” state may reflect the lowest level in an individual’s job resources (Hobfoll, 2001).

2.3 “Lying flat”

2.3.1 Concept and origin of “lying flat”

The term “lying flat” originally referred to a physical posture, more specifically, the state when the body lies flat. However, as an internet buzzword, its semantic and pragmatic meanings are diverse across different cultural contexts (Peng, 2023). In recent years, the concept of “lying flat” (disengagement) has gained popularity on Chinese social media, referring to a social phenomenon: some young people give up proactively pursuing career advancement and consumerist lifestyles; instead, they choose a low-desire, go-with-the-flow approach to life.

This phenomenon reflects resistance and response to intense competition in society and overwhelming pressure in work and life.

The origin of the "lying flat" concept can be traced back to Russell's study *In Praise of Idleness*, in which Russell praised the value of idleness and criticized the excessive emphasis on labor and devaluation of idleness in modern society (Russell, 1935). He advocated reducing working hours, arguing that doing so would promote creativity and personal development, thereby improving the overall well-being of a society. This provides a philosophical foundation for understanding the "lying-flat" work state, suggesting that in the face of extreme demands and pressures of modern labor, idleness may serve as a rational coping strategy (Russell, 1935). Although this article was written in 1935, Russell's insights on work-life balance remain enlightening for contemporary society, where work-life imbalance is increasingly prevalent. The use of idleness, advocated by Russell, helps alleviate individuals' psychological stress while challenging the productivity-priority workplace culture, which aligns closely with current discussions on addressing burnout and "lying flat" in the workplace. However, his theory still requires further validation and adaptation within the context of modern society, especially considering the substantial changes in economic and social conditions. Russell's perspective can be viewed as a support for the philosophy of "disengagement". In particular, it encourages individuals to withdraw from excessive work, to re-evaluate life, and to seek alternative sources of value in life. He argues that such a shift not only benefits individuals' psychological well-being and enhances creativity, but also exerts a positive influence on the overall well-being and progress of society.

In *The Sane Society*, Fromm (1955) elaborated on the issue of human alienation in modern society, criticizing how social conditions lead to individuals' psychological distress. He argued that many social structures, particularly those related to labor, force individuals away from their real selves and hinder the achievement of human fulfillment. His perspective provides an insightful psychological and social critique for understanding the phenomenon of "lying flat" in the workplace. He emphasized that besides workplace conditions, broader economic and cultural structures in society may also drive individuals to develop "lying flat" as a self-protective mechanism against excessive commercialism and mechanization. The analysis revealed the necessity of improving social structures and work environments to promote individuals' psychological well-being and the overall well-being of society (Fromm, 1955). Although rooted in its time, Fromm's argument remains relevant and inspiring today in addressing negative workplace culture and promoting job satisfaction.

Although Russell and Fromm did not explicitly use the term "disengagement", their

arguments involved individuals' withdrawal or alienation from meaningful social and personal activities, which is aligned conceptually with "disengagement", laying a foundation for subsequent research on this concept. In particular, Fromm focused on how the pressures of social structures deprive individuals of real selves and the motivation to participate in society, which resonates with the process described in disengagement theory where elderly adults withdraw from social activities.

"Disengagement" was formally proposed by sociologists Elaine Cumming and William Henry in their work *Growing Old: The Process of Disengagement* (Cumming & Henry, 1961). The theory offered a valuable perspective on how the elderly interact with society and how this social interaction changes with aging. It was proposed that as individuals age, they gradually disengage from social roles. This disengagement is a bidirectional process, in which the society reduces expectations of the elderly, while the elderly reduce participation in social roles. The authors argued that such disengagement is natural and inevitable, representing an adaptive response to aging.

Disengagement was defined as the uncoupling of individuals' selves from work roles. "(I)n disengagement, people withdraw and defend themselves physically, cognitively, or emotionally during role performances" (Kahn, 1990, p. 694). Research has shown that highly engaged employees display energy, focus, and dedication, whereas disengaged employees typically exhibit low motivation, emotional detachment, and reduced job satisfaction (Kahn, 1990).

Further research revealed that resource depletion not only caused disengagement but also created psychological conditions fostering disengagement. Individuals' perceptions of three psychological conditions, including meaningfulness, safety, and availability, directly determined whether they would fully engage in their work or distance themselves from it. Psychological meaningfulness refers to the value or purpose individuals perceive from investing themselves in their work. Psychological safety refers to feeling able to express one's true self without fear of negative consequences, encompassing their views, opinions, and emotions, essentially about who they are and who they want to become. Psychological availability refers to individuals' sense of having sufficient personal resources (e.g., physical and emotional resources) to engage in work. Previous research revealed how psychological safety, meaningfulness, and availability influence work engagement, providing an early theoretical framework for understanding work states in complex work environments such as healthcare (Kahn, 1990).

Even disengaged employees will complete tasks, but they uncouple themselves physically, cognitively, and emotionally from their work and supresssing their real selves in work (Kahn,

1990, 1992). Subsequently, scholars expanded this concept, defining disengagement as emotional, cognitive, or physical “distancing oneself from one’s work” and “experiecing negative attitudes toward the work object, work content, or one’s work in general” (Demerouti et al., 2001, p. 501).

As research has advanced and society has evolved, “lying flat” (disengagement) has become a mature concept. Key theoretical perspectives used to explain “lying flat” (disengagement) include burnout theory, the JD-R theory, COR theory, and coping theory. These frameworks commonly conceptualize “lying flat” (disengagement) as distancing oneself emotionally, cognitively, or physically from work.

2.3.2 Factors influencing “lying flat”

A lack of psychological meaningfulness, safety, and availability may lead individuals’ “lying flat” (disengagement). Enhancing individuals’ psychological engagement at work requires meeting their fundamental emotional and psychological needs, which offers managerial implications for preventing “lying flat” (disengagement) in practice (Kahn, 1990). “Psychological presence at work”, that is, the mental state and degree of involvement employees experience while working, is essential for preventing “lying flat”. Effective psychological presence not only improves individuals’ job performance but also contributes to positive workplace relationships and improved team collaboration efficiency (Kahn, 1992). Poor working environments, a lack of career development opportunities, inappropriate leadership styles, and insufficient recognition and rewards contribute to employees’ tendency toward “lying flat” (Afrahi et al., 2022). Reasons for employee disengagement include unfavorable work environments, insufficient support and resources, ineffective communication between management and employees, a lack of career development opportunities and training, perceived stagnation in personal growth, unhealthy organizational culture, and lack of incentives, all of which contribute to “lying flat” (Keeble-Ramsay & Armitage, 2014). Factors such as work stress, unfair treatment, insufficient support, and burnout can cause employees to gradually shift from active engagement to active disengagement (Dawsey & Taylor, 2011). Organizations should recognize and utilize each employee’s unique assets and strengths, including their talents, skills, experience, and interests, develop personalized development plans, and offer training and growth opportunities, thereby helping them unleash their potential. Organizations should also provide timely recognition and rewards for each employee’s contributions and performance to enhance their sense of achievement and belongingness, while offering necessary resources and support to help employees address challenges at work (Wilson,

2014). Through a review of literature on relevant factors, we identified the following main determinants.

A. Organizational support

Employees’ perceived organizational support influences their work attitudes and behaviors. High levels of organizational support can increase employees’ job satisfaction and commitment, reducing the risk of “lying flat”. Organizational support includes the provision of psychological support, manageable workloads, career training, and physical resources. These elements are essential to reducing emotional fatigue and enhancing work engagement. Perceived organizational support was found to be positively associated with affective commitment and job performance, and can effectively decrease turnover intention while increasing work engagement and reducing “lying flat” (Eisenberger et al., 1986). A lack of supervisor recognition, communication, guidance, and care would induce “lying flat” (Kahn, 1990). Conversely, supportive work environments, including leadership support, relationships with coworkers, and resource availability, could reduce employees’ “lying flat” (Spreitzer et al., 2005). When employees perceive greater opportunities for career development, their psychological empowerment increases, thereby reducing their tendency toward “lying flat”. This underscores the importance of organizations providing career development opportunities to sustain employees’ engagement and reduce “lying flat” (Kraimer et al., 1999). Given that, organizations should provide adequate opportunities for career development to improve employees’ work engagement and psychological well-being (Taris & Schaufeli, 2016). Sufficient career development opportunities can help employees cope with job demands, thus reducing their emotional exhaustion and “lying flat” (Bakker & Demerouti, 2007; Halbesleben & Wheeler, 2008). Managers should detect early signs of “lying flat” and enhance employees’ skills and career prospects through training, career development plans, and promotion pathways, thereby reactivating their motivation, enhancing their satisfaction, and improving their overall work engagement (Prencipe, 2001).

B. Work autonomy

Higher levels of work autonomy can effectively reduce employees’ emotional exhaustion, thus decreasing the likelihood of “lying flat” at work. Research has shown that when employees possess more autonomy, they are more likely to maintain high levels of work engagement and reduced “lying flat” (Bakker et al., 2005). As a job resource, work autonomy could significantly enhance work engagement and reduce burnout and “lying flat” (Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004). In addition, by strengthening employees’ sense of control and competence, work autonomy could reduce emotional exhaustion and “lying flat” induced by

high job demands; in the face of challenges, employees with higher autonomy tend to be more engaged in work and are less likely to “lie flat” (Xanthopoulou et al., 2007). Moreover, the fit between job demands and resources and coping strategies influences employees’ stress responses; under high job demands, high levels of work autonomy (as a supplementary resource) help employees cope with stress more effectively, thus reducing their emotional exhaustion and “lying flat” (De Jonge & Dormann, 2006).

C. Patient threats and violence

Based on the JD-R theory and the COR theory, patient threats and violence, as workplace stressors, are associated with employees’ “lying flat”. The JD-R theory posits that job demands (e.g., patient threats and violence) may lead to emotional exhaustion and withdrawal, whereas job resources (e.g., social support) buffer these negative outcomes. The COR theory states that actual resource loss or a threat to resource loss (e.g., emotional energy and social capital) can trigger defensive strategies, including “lying flat” (Hobfoll, 1989). Patient threats and violence (e.g., verbal or physical aggression) constitute high job demands; within the JD-R framework, these demands deplete emotional resources, thus causing emotional exhaustion, further leading to “lying flat”, manifested as reduced engagement, avoidance of responsibilities, and emotional disengagement (Demerouti et al., 2001). For instance, when healthcare professionals face patient violence, their emotional resources will be excessively depleted; without adequate resources (e.g., assistance from colleagues), they may choose to lie flat to minimize further loss (W. Liu et al., 2018). From the COR perspective, patient violence is treated as a threat to resources; the depletion of employees’ perceived resources (e.g., safety and sense of control) prompts resource protection cycles in which “lying flat” serves as an adaptive strategy to retain remaining resources (Hobfoll, 2001). Empirical evidence has confirmed that this “threat – resource depletion” chain can increase “lying flat”, forming a negative feedback loop (Halbesleben & Buckley, 2004).

D. Workload

Research has shown that high workload is a key predictor of burnout and often leads to “lying flat” through energy exhaustion (Bakker et al., 2014). Workload was found to be associated with all three dimensions of burnout (i.e., emotional exhaustion, depersonalization, and reduced personal accomplishment); high workload increases emotional exhaustion, further influencing the other two dimensions, ultimately leading to “lying flat” (Taris et al., 2005). In addition, as a key predictor, high workload could reduce employees’ sense of control and accomplishment, thereby increasing the risk of “lying flat” (Bakker & Demerouti, 2017; Leiter & Maslach, 2004). Moreover, high workload not only directly impacts burnout but also

indirectly causes “lying flat” by reducing recovery time (Sonnentag et al., 2012).

E. Role conflict

As a job demand, role conflict could significantly increase employees’ emotional exhaustion and lead to “lying flat”. High levels of role conflict often cause employees overwhelmed, confused, and lost, which further reduces their work engagement and initiative (Alarcon, 2011; Bakker & Demerouti, 2007). Role conflict was found to be positively associated with “lying flat”. Employees facing high levels of role conflict are more likely to experience energy and emotional exhaustion, which can reduce their engagement and increase the likelihood of “lying flat” (Schaufeli et al., 2009). However, positive job design can mitigate the negative effects of role conflict, thereby reducing “lying flat” (Tims et al., 2013). “Lying flat” tends to be reduced in organizations that support work-family balance. Therefore, while work-family conflict is a stressor that may increase employees’ tendency toward “lying flat”, organizations can reduce this tendency by promoting the separation of profession and personal life (Innstrand et al., 2008). Research showed that high levels of job demands were related to work-family conflict, which in turn could trigger emotional exhaustion and “lying flat” among employees, as such conflict could negatively impact their work life and reduce their motivation at work (Bakker et al., 2008; Greenhaus & Powell, 2006). Therefore, the greater the work-family conflict, the lower employees’ work engagement, and the higher the likelihood of “lying flat”. In addition, such conflict can affect employees’ family and leisure life, further increasing their emotional exhaustion and “lying flat” (Innstrand et al., 2008; Voydanoff, 2005).

2.3.3 Measurement of “lying flat”

Researchers often adopt qualitative methods to measure “lying flat” (disengagement), whereas quantitative studies generally apply the Oldenburg Burnout Inventory (OLBI) and the Utrecht Work Engagement Scale (UWES).

The OLBI was developed by Demerouti et al. (2003). It includes two subscales: disengagement and exhaustion, which together constitute the core dimensions of burnout. Each subscale contains both positively and negatively worded items to measure opposite outcomes, such as disengagement versus engagement, and vigor versus exhaustion. Compared with the three-dimensional structure of the Maslach Burnout Inventory (MBI) (i.e., emotional exhaustion, depersonalization, and reduced personal accomplishment), the OLBI focuses on more specific and multidimensional manifestations of burnout. The exhaustion dimension encompasses affective, physical, and cognitive aspects of burnout, aiming to capture the physical and psychological strain experienced by individuals under prolonged work stress. The

disengagement dimension reflects individuals' shift from dedication to "lying flat", offering deeper insight into work relationships and professional identification. The OLBI was designed to be more comprehensive and balanced, incorporating both affirmative and reverse-worded items to ensure accurate assessment of burnout (Demerouti et al., 2001). Similar to the Maslach Burnout Inventory – General Survey (MBI-GS), the OLBI applies to practitioners across occupations and sectors rather than being limited to human service professions. Studies in Greece and the US demonstrated the OLBI's good convergent validity and stability, and multiple studies confirmed the reliability of both the exhaustion and disengagement dimensions of the OLBI, providing a robust foundation for subsequent research and application (Demerouti et al., 2003).

The UWES was developed by Schaufeli et al. (2002). The UWES consists of three subscales that assess dedication, vigor, and absorption. In addition, the two subscales measuring exhaustion and cynicism are used to measure employees' work engagement levels. The original UWES contains 17 items, later supplemented by a nine-item short version. Its three core dimensions are: 1) Vigor. This dimension assesses employees' energy and mental resilience at work, as well as their persistence in the face of challenges, for example, "*At my work, I feel bursting with energy*". 2) Dedication. It reflects strong involvement and commitment to work goals, for example, "*I find the work that I do full of meaning and purpose*". 3) Absorption. This dimension describes employees being totally concentrated and immersed in work, such that time passes quickly, for example, "*When I am working, I forget everything else around me*". Although the UWES does not directly measure "lying flat" (disengagement), its dimensions for measuring work engagement help assess "lying flat". Highly engaged employees tend to exhibit high vigor, dedication, and absorption; conversely, a lack of these characteristics may reflect "lying flat". Thus, low UWES scores (particularly in the dimensions of vigor and dedication) can imply "lying flat". Theoretically, "lying flat" is the opposite of work engagement. Employees with lower scores across the three dimensions of the UWES may exhibit indifference, lack of motivation, and low participation, which reflect the state of affective, cognitive, or physical distancing from work (Schaufeli et al., 2002). Research has shown that lower dedication, vigor, and absorption scores combined with higher emotional exhaustion and depersonalization scores often indicate the presence of "lying flat". Factor analyses suggested that "lying flat" (disengagement) constituted a dimension of burnout, and burnout was negatively associated with work engagement (Demerouti et al., 2010).

Another approach to measuring "lying flat" derives from coping theory. Coping theory views "lying flat" as an adaptive coping effort that helps individuals respond to adverse

conditions and demands or negative emotional experiences (Folkman & Moskowitz, 2004). The COPE inventory consists of self-reported scales that have been widely applied to assess coping strategies individuals adopt when facing stress. In particular, “lying flat” (disengagement) is conceptualized as part of coping efforts and is part of the key dimensions in the COPE inventory. Through multidimensional evaluation, the COPE enables researchers to understand how individuals cope with stress, particularly the choice of “lying flat” in situations perceived as uncontrollable or unmanageable. In the COPE, “lying flat” (disengagement) is defined as individuals withdrawing from problems or stressors and avoiding dealing with them as a coping strategy. Some items of the COPE are dedicated to measuring this “lying flat” strategy, for example, “*I reduce the amount of effort I'm putting into solving the problem*”, “*I turn to work or other substitute activities to take my mind offthings*”, “*I admit to myself that I can't deal with it, and quit trying*”, “*I go to movies or watch TV, to think about it less*”, “*I daydream about things other than this*”, and “*I drink alcohol or take drugs, in order to think about it less*” (Carver et al., 1989).

2.4 Burnout

2.4.1 Concept of burnout

Burnout is a complex and multidimensional psychological state. It has been defined and described across a wide range of research fields. A review of relevant literature shows that at least 30 different definitions and descriptions have been proposed. This diversity reflects the richness of its connotation and its complexity as a research topic. Burnout research encompasses perspectives from individual psychology, organizational behavior, and socio-cultural contexts.

The concept of burnout was first proposed by American psychologist Herbert Freudenberger in 1974. In his article *Staff Burn-Out* (Freudenberger, 1974), he first used the term “burnout” to describe the fatigue and inefficacy experienced by social service workers due to exposure to prolonged work stress and emotional demands. Burnout is a specific psychological state characterized by emotional exhaustion, reduced personal accomplishment, and a detached attitude toward others. The quantification of this concept was carried out by Christina Maslach, who developed the widely known Maslach Burnout Inventory (MBI), which measures three core dimensions of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981).

Subsequent studies further advanced the understanding of burnout. The fatigue symptom

of burnout often stems from excessive demands imposed by oneself or the external environment, leading to the depletion of workplace vigor, integrative ability, and internal resources. There are diverse perspectives on the definition and understanding of burnout. Some scholars regarded burnout as an individual's response to prolonged work stress and divided its development into stress, strain, and defensive coping phases, emphasizing burnout as a gradual evolutionary process (Cherniss, 1980a, 1980b). Other researchers defined burnout as a progressive phenomenon in which the energy, purpose, and idealism at work are gradually lost as a result of the work conditions, highlighting the close relationship between burnout and work environment (Edelwich & Brodsky, 1980). Burnout is regarded as a process of gradual energy depletion triggered by excessive demands from oneself or external environments, eventually exerting strong effects on individuals' motivation, attitudes, and behavior (Cherniss, 1993; Freudenberger & North, 1985). Some scholars posit that burnout arises from misalignment between individual expectations and organizational structures, manifested as emotional exhaustion, depersonalization, and reduced personal accomplishment (Leiter, 1991).

Integrating various perspectives, burnout can be defined as a persistent and negative psychological state closely related to work. Its core feature is severe energy depletion, manifested as emotional exhaustion, reduced efficacy, decreased motivation, and negative changes in attitudes and behaviors. This definition highlights burnout as a gradually developing psychological condition, which may not be fully recognized by individuals during its progression (Schaufeli & Enzmann, 1998). "Work engagement" is considered the opposite of burnout and can be used to assist with the understanding of burnout. According to relevant research, work engagement represents a positive psychological state characterized by high energy, strong work involvement, and high efficacy. This sharply contrasts with the core features of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 2001).

The concept of burnout proposed by Maslach and Jackson (1981) remains widely used today. It includes three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion refers to individuals' feelings of being emotionally overwhelmed as a result of excessive work responsibilities, reflecting the degree of work stress and resource depletion, often manifested as irritability and emotional detachment. Depersonalization refers to individuals' negative, cynical attitudes toward service recipients, exhibiting callous or hostile behavior, and treating others as objects rather than humans, thus influencing their work attitudes and behavior. Reduced personal accomplishment represents the feelings of being incompetent and dissatisfied with one's work. They believe that their

professional contribution is limited and that their role is unimportant, which negatively affects their self-esteem and job performance (Maslach & Jackson, 1981).

2.4.2 Interaction between job demands-resources and burnout

According to the "health impairment process" in the JD-R theory, prolonged or excessive job demands lead to continuous depletion of employees' resources (e.g., energy and emotion regulation capacity). If such resources cannot be replenished in time, it will result in psychological fatigue, thereby reducing personal accomplishment. When employees face job demands beyond their coping capacity over a long period, they may develop a subjective perception of "incompetence", which will weaken their self-efficacy (Bandura, 1997). Persistent time pressure may reduce task completion quality and trigger negative feedback, further diminishing employees' evaluation of their own capability, eventually manifested as reduced personal accomplishment (Bakker et al., 2014). Multiple empirical studies found that job demands (e.g., role overload and work-family conflict) were significantly negatively associated with personal accomplishment. The "motivational process" in the JD-R theory suggests that job resources stimulate work motivation and foster work engagement by satisfying employees' basic psychological needs, which further enhances personal accomplishment. Empirical studies found that job resources (e.g., leadership support and career development opportunities) were significantly positively associated with personal accomplishment (Xanthopoulou et al., 2009b). Job demands refer to job characteristics that consume individuals' physiological or psychological resources (e.g., workload, time pressure, and role conflict), and prolonged exposure to high demands may induce energy depletion and burnout. Job resources are those that promote individuals' growth, learning, and goal attainment (e.g., social support, autonomy, and skill development opportunities). Job resources help stimulate work motivation, buffer the negative effects of job demands, and directly promote work engagement (Bakker & Demerouti, 2007). High workload forces individuals to continuously invest time and energy, squeezing resources needed for developing skills or sustaining social support, thus forming a "resource loss spiral" (Halbesleben, 2006). Prolonged time pressure reduces the organization's intention to provide support to employees and decreases employees' motivation to proactively seek resources, leading to reduced resource regeneration capacity (Schaufeli & Bakker, 2004). Job demands weaken job resources through depletion, obstruction of acquisition, or ineffective transformation, causing net resource loss. Based on COR and JD-R theory, resource loss further leads to reduced personal accomplishment through three paths: decreased efficacy, diminished meaningfulness, and reduced motivation. In addition, the interaction of job demands (e.g., role

conflict) and resource loss (e.g., reduced job resources) was found to significantly predict burnout (including reduced personal accomplishment). When resources were sufficient, the effect of high job demands on personal accomplishment was weaker; when resources were depleted, the effect of high job demands became nearly three times stronger. This demonstrates that job demands' "toxic" effect on personal accomplishment was realized through the mediation of resource depletion (Halbesleben, 2006).

A. Organizational support

Employees' perceived organizational support is closely related to their job satisfaction, commitment, and trust. When employees perceive adequate support from the organization, they tend to show more positive attitudes and behaviors, and vice versa (Eisenberger et al., 1986). Perceived supervisor support, which is positively associated with perceived organizational support, encourages reciprocal behavior and is conducive to fostering a supportive organizational atmosphere and enhancing employees' organizational identification (Eisenberger et al., 2001). Burnout is a negative psychological experience that arises from prolonged exposure to work stress and lack of resources, whereas organizational support is essential factor that mitigates burnout; by providing necessary support and resources, organizations can help employees effectively hope with work stress, thus reducing the prevalence of burnout (Maslach et al., 2001). In addition, perceived organizational support was found to be positively related to affective commitment, which could reduce burnout and turnover intention among employees (Rhoades et al., 2001). A Study of physicians in tertiary public hospitals found that burnout was significantly negatively associated with perceived organizational support among psychiatrists, suggesting that enhancing organizational support for psychiatrists can prevent and relieve burnout (L. Liu et al., 2024). Perceived limited career development opportunities increase the likelihood of burnout, whereas adequate job design and the utilization of role resources can reduce burnout (Bruning & Campion, 2018). Inadequate career development opportunities can hinder job performance by increasing burnout; conversely, when employees perceive sufficient career development opportunities, they tend to be more engaged in work and less likely to be emotionally exhausted (Balouch & Hassan, 2014). A study examined the impact of career development opportunities on burnout using the diary method and found that clear career development paths increased employees' work engagement and decreased their burnout significantly (Breevaart et al., 2016). Moreover, organizational support effectively buffers resource depletion caused by high job demands by providing emotional resources (e.g., social support) and instrumental resources (e.g., trainings). When employees perceive that the organization cares about their well-being, their self-efficacy and

professional identification will be enhanced, which is conducive to dealing with reduced accomplishment caused by effort-reward imbalance. Research showed that adequate organizational support could lower the incidence of reduced accomplishment (Bakker & Demerouti, 2017). Organizational support triggers employees’ reciprocal motivation, driving them to maintain reciprocal relationships through higher work engagement. This positive loop can effectively prevent the cognition of “ineffective effort”. Especially in contexts of high emotional labor, each 1 SD increase in organizational support could result in a decrease in the risk of reduced personal accomplishment by 0.37 SD (Lesener et al., 2019).

B. Work autonomy

Higher work autonomy allows individuals to agilely adjust strategies and use their skills and strengths at work, thereby perceiving greater efficacy and values upon task completion, in other words, enhancing their personal accomplishment (Maslach et al., 2001). In addition, work autonomy could reduce burnout and increase employees’ engagement in daily work and job performance (Afrahi et al., 2022). In particular, employees with higher work autonomy tend to show lower levels of emotional exhaustion, as autonomy allows them to effectively cope with high emotional demands at work (Collie et al., 2018). High work autonomy enables employees to effectively navigate job demands, thus reducing their emotional exhaustion and depersonalization. It also strengthens employees’ sense of control, thereby releaving burnout (Bakker & Demerouti, 2007). Autonomy-related resources (e.g., autonomy in work arrangements) provide employees a sense of control over their work and enhance their self-determination, enabling them to be more engaged in work and experience higher levels of efficacy and values, thereby increasing their personal accomplishment (Bakker et al., 2014). Conversely, low work autonomy reduces individuals’ perceived control over work, making self-determination less attainable, which hinders intrinsic motivation, leading to lower work engagement levels (Bakker & Demerouti, 2007). When individuals cannot autonomously arrange their work or participate in decision-making, their work behaviors are likely to be externally driven rather than self-chosen, which leads to a decline in satisfaction upon task completion, eventually weakening the self-evaluation of their capability, resulting in reduced accomplishment (Hakanen et al., 2006).

C. Workload

Workload represents a typical job demand. It includes quantitative load (e.g., excessive work volume and high number of tasks) and qualitative load (e.g., high job complexity and required skills exceeding their capability) (Demerouti et al., 2001). According to the energy depletion process of the JD-R theory, high workload continuously depletes individuals’

cognitive, affective, and physical resources; when resource depletion exceeds recovery, it may result in "resource deficit", making individuals struggle to complete tasks effectively and frequently experience unmet goals or poor performance, which leads to self-doubt about their cability, ultimately resulting in reduced personal accomplishment (Bakker & Demerouti, 2007). In addition, high workload increases the risk of burnout, manifested as emotional exhaustion and reduced job satisfaction (Koeske & Koeske, 1989; Schaufeli et al., 2009), whereas job resources (e.g., social support and work autonomy) can mitigate this risk (Bakker & Demerouti, 2007). Sustained excessive workload was found to be significantly associated with burnout and depressive symptoms, and this association strengthened over time (Hakanen et al., 2008). Under prolonged exposure to work overload, if employees cannot complete tasks within the defined schedule, it may trigger the negative cognition of not being competent for this job, thus reducing their professional efficacy (Schaufeli & Bakker, 2004). In contrast, moderate workload, by creating challenges, may stimulate individuals' potential and enhance personal accomplishment (Bakker et al., 2014). When workload is low, individuals' personal resources are sufficient to meet task demands, making the availability of job resources have only a limited impact on their personal accomplishment. For example, when employees are required to complete only a small number of simple tasks, they may still maintain a high level of personal accomplishment even without leadership feedback or skill support; however, as workload increases (e.g., more complex tasks), insufficient resource support would lead to a decline in efficacy, resulting in reduced personal accomplishment (Bakker et al., 2004).

D. Role conflict

Role conflict occurs when individuals face conflicting role expectations that create cognitive dissonance and decision-making strain (Jackson & Schuler, 1985). It directly increases reduced personal accomplishment through the energy depletion path and exerts an indirect effect through the buffering of job resources. Role conflict, as a hindrance job demand, was found to be significantly associated with employees' emotional exhaustion and depersonalization, suggesting that high levels of role conflict could lead to a higher risk of burnout (Bakker & Sanz-Vergel, 2013; Schaufeli et al., 2009). Among Swedish healthcare professionals, role conflict was found to be significantly related to burnout, serving as a significant predictor of both dimensions of burnout – emotional exhaustion and depersonalization; it increased employees' psychological strain, making them more prone to burnout syndrome (Peterson et al., 2008). Role conflict reduces personal accomplishment through the energy depletion path. Sustained role conflict would continuously deplete individuals' emotional regulation resources, attention, and self-efficacy, weakening perceived

work value, eventually leading to reduced personal accomplishment (Leiter & Maslach, 1988). When role conflict is low, high levels of job resources (e.g., organizational support) could significantly diminish reduced personal accomplishment; when role conflict is high, individuals cannot develop efficacy even with abundant resources, making the buffering effect of resources limited (Leiter & Maslach, 1988). When individuals cannot effectively meet the demands of multiple roles, they will develop the cognition of being incompetent (Hobfoll, 2011a). Research showed that each 1 SD increase in role conflict increased reduced personal accomplishment by 0.37 SD (Bowling et al., 2017).

2.4.3 Relationship between burnout and “lying flat”

Regarding the relationship between burnout and “lying flat” (disengagement), some scholars stated that burnout and work engagement might be negatively associated in practice (Schaufeli & Bakker, 2004). The JD-R framework posits that burnout and engagement are two relatively independent concepts. Job demands are the primary driver of burnout, whereas job resources are the primary driver of engagement. Moreover, reduced personal accomplishment was found to be strongly associated with “lying flat”. When employees lack key job resources (e.g., organizational support, work autonomy, and performance feedback) for a prolonged period, their efficacy and perceived value in task completion would continue to decline, leading to the cognition that “effort is meaningless”, that is, reduced personal accomplishment. To alleviate reduced personal accomplishment and preserve limited existing psychological resources, individuals tend to reduce their efforts, leading to “lying flat” (disengagement) (Hobfoll, 1989). Emotional exhaustion is often a precursor to “lying flat”. As work stress increases, employees first experience emotional exhaustion; subsequently, to cope with this persistent strain, they gradually “lie flat” at work, resulting in reduced engagement (Demerouti et al., 2001).

Burnout is often considered the antecedent of “lying flat”. According to the JD-R model, when job demands (e.g., high-intensity tasks) exceed employees’ resources (e.g., social support), it would lead to burnout, further resulting in “lying flat” (Demerouti et al., 2001). For example, emotionally exhausted employees, due to depleted energy, are more likely to develop into the “lying-flat” state (Bakker et al., 2004). This view has been supported by empirical studies. Multisample research showed that burnout significantly predicted “lying flat” (disengagement), with a correlation coefficient of .45, suggesting that employees with burnout are more likely to “lie flat” at work (Schaufeli & Bakker, 2004). Similarly, longitudinal research found that employees with higher levels of initial burnout reported higher subsequent disengagement, and vice versa (Leiter & Maslach, 2005).

Reduced personal accomplishment is a key antecedent of “lying flat”. According to the motivational process in the JD-R model, when individuals lack job resources such as autonomy, performance feedback, and career development opportunities for a prolonged period, their ability to achieve work goals and experience success is constrained (Demerouti et al., 2001). Such persistent frustration severely harms individuals’ efficacy and perceived meaningfulness, resulting in reduced personal accomplishment, which in turn, undermines their intrinsic motivation and energy, making them unable to maintain engagement in work, manifested as cognitive distraction, emotional detachment, and passive behavioral responses, ultimately leading to “lying flat” (Schaufeli & Taris, 2014). Low levels of job resources (e.g., autonomy, development opportunities, performance feedback, and social support) were found to significantly predict both reduced personal accomplishment and “lying flat” (Bakker & Demerouti, 2007; Crawford et al., 2010). A lack of resources required for effective work and growth would foster conditions for reduced personal accomplishment and “lying flat” (Schaufeli, 2017).

Empirical evidence has confirmed the significant negative relationship between burnout and engagement, such that the higher the burnout level, the lower the engagement, and vice versa. In addition, reduced personal accomplishment would weaken individuals’ intrinsic motivation, making them believe that “continued effort cannot change the situation”, thereby prompting them to reduce engagement and “lie flat” (Schaufeli & Bakker, 2004). When reduced personal accomplishment persists, intrinsic motivation would be severely weakened. Individuals no longer work for the enjoyment, challenge, or value of the work itself, and gradually lose interest and enthusiasm in work tasks. The loss of intrinsic motivation deprives individuals of the psychological energy needed for proactive work engagement, manifested as reduced initiative and an indifferent attitude toward task goals (Schaufeli et al., 1996). When job resources fail to meet individuals’ basic psychological needs required to sustain motivation, it becomes difficult to maintain work engagement; instead, it leads to energy withdrawal and alienation (Bakker & Demerouti, 2007).

2.4.4 Burnout and “lying flat” among psychiatrists

A review of multiple studies indicated that psychiatrists experienced significantly higher levels of burnout globally (Rotenstein et al., 2018). Approximately 50%-60% of physicians worldwide reported “lying flat” (disengagement) or burnout, with relatively higher rates in developed countries (West et al., 2018). For example, in the US, burnout was found to be highly prevalent among surgeons (Campbell et al., 2001). Burnout not only affects the mental health of

psychiatrists but also leads to reduced job performance, increased “lying flat”, and declined job satisfaction.

The JD-R theory posits that job demands and job resources influence employees’ psychological states and behavioral outcomes through the “health impairment process” and the “motivational process”. Through the health impairment process, excessive demands and insufficient resources weaken personal accomplishment, which then triggers “lying flat” through motivational depletion. Multiple studies have shown that, as psychiatrists persistantly face complex cases, intensive emotional labor, and high burnout risk, their prevalence of reduced personal accomplishment was significantly higher compared to many other professions, often accompanied by “lying flat”. For instance, a survey of psychiatrists in India found that 68% of the respondents experienced reduced personal accomplishment due to professional stigma, which was significantly associated with lower work engagement, being its strongest predictor (Kumar, 2016). When psychiatrists expect that continued resource investment will result in greater loss, those with reduced personal accomplishment are more likely to adopt “minimal work input” strategies to retain limited psychological resources (Hobfoll, 2011b). Due to reduced accomplishment (i.e., incapability of improving healthcare systems), psysicians may adopt procedural compliance instead of proactive innovation to prevent further resource loss from ineffective efforts (West et al., 2018).

High levels of organizational support was found to significantly reduce “lying flat”. The organization’s support systems and appropriate work conditions could significantly reduce burnout and “lying flat” (disengagement) among physicians (Shanafelt et al., 2017). As a core job resource, organizational support can meet employees’ needs for belongingness, competence, and autonomy (Deci & Ryan, 2000). By providing instrumental and emotional resources, it can buffer stress (Rhoades & Eisenberger, 2002) and mitigate withdrawal behaviors resulting from resource depletion (Bakker & Demerouti, 2017). By enhancing primary-level psychiatrists’ professional accomplishment (Spreitzer, 1995), organizational support can increase their work motivation and resilience (Hobfoll, 2001), thus hindering the development of “lying flat”. By fostering personal accomplishment as a key source (Hobfoll, 1989), organizational support inhibits the resource loss spiral (Lee & Ashforth, 1996). With high levels of patient threats and violence, the effect of organizational support in mitigating “lying flat” becomes even more pronounced. Although high patient threats and violence cause resource depletion (Hobfoll, 2001) and prompt psychiatrists to enter a defensive state, they can also enhance the protective effect of organizational resources (Bakker et al., 2005). Moreover, high workload (e.g., excessive tasks and time pressure) could enhance the positive impact of organizational support on

personal accomplishment (Demerouti et al., 2001). Meanwhile, high role conflict (e.g., role ambiguity and goal conflict) could strengthen the indirect effect of organizational support in reducing withdrawal via enhanced personal accomplishment; role conflict triggers goal ambiguity and self-doubt, which in turn facilitates the conversion of organizational resources into personal accomplishment (Crawford et al., 2010). By providing resources (e.g., instrumental resources and value recognition), organizational support could directly enhance psychiatrists’ confidence in their competence and the perceived meaningfulness of work (Deci & Ryan, 2000). From a COR perspective, organizational support, as external resource input, can supplement individuals’ depleted resources (Hobfoll, 1989) and alleviate meaninglessness caused by work challenges (Spreitzer, 1995), thus hindering reduced personal accomplishment.

High autonomy allows psychiatrists to make flexible decisions, thus increasing their professional efficacy and directly enhancing accomplishment (Bakker & Demerouti, 2017). It also mitigates “lying flat” by fostering a sense of control that buffers stress (Hobfoll, 2002). Prolonged reduced personal accomplishment leads to declined motivation, resulting in cognitive and behavioral “lying flat” at work (Maslach et al., 2001). “Lying flat”, in turn, limits psychiatrists’ engagement, leading to reduced performance and learning opportunities, which further reduces personal accomplishment, forming a “reduced personal accomplishment – ‘lying flat’ spiral” (Taris & Schaufeli, 2016). However, high work autonomy can break this spiral (e.g., by improving decision-making to regain efficacy), while low autonomy accelerates it (Demerouti et al., 2001). When patient threats and violence, as well as workload, are extremely high, the protective effect of work autonomy in enhancing personal accomplishment and reducing “lying flat” is more pronounced (Bakker et al., 2005). However, psychiatrists with depleted resources (e.g., depleted energy) cannot use autonomy effectively due to a lack of resources and may even experience further depetion due to decision-making burden, turning autonomy into a “resource burden”; in this case, even those with high autonomy may exhibit reduced personal accomplishment and “lying flat” (Xanthopoulou et al., 2007). Job demands continuously deplete psychiatrists’ psychological and cognitive resources, restricting the availability of resrouces needed for autonomy (e.g., time and psychological safety), thus having a “resource inhibition” effect (Halbesleben & Wheeler, 2015). When facing role conflict, low-autonomy psychiatrists would feel ineffectiveness for not being able to adjust their work arrangement, which leads to a greater risk of “lying flat” (Schaufeli & Taris, 2014). Thus, work autonomy is a key resource whose effectiveness in mitigating reduced personal accomplishment and “lying flat” among psychiatrists depends on the level of job demands in the work environment. Job demands can make the protective effect of work autonomy more pronounced

by enhancing the effect of resources (Bakker & Demerouti, 2017).

Heavy workload, emotional labor, and understaffing can easily lead to burnout. Psychiatrists often face intense medical demands from patients, need to deal with complex cases, and have to manage extensive documentation. This burden is further intensified by increased patient volume and staffing shortages. In addition, long-hour shifts, overtime work, and emergency duties reduce their rest time. Such an environment with sustained high load and high stress makes them more prone to burnout (Browning et al., 2007). Growing patient volume, complex treatment processes, extensive documentation, increased emergency cases, and frequent understaffing result great time pressure and task load, directly depleting psychiatrists’ temporal, physiological (e.g., physical and mental energy), and cognitive resources (Kumar, 2007). Sustained overload suppresses resource recovery, causing continuous resource deficits. When high job demands persist and resources remain insufficient, according to the health impairment process in the JD-R model, psychiatrists will experience continuous depletion of their resources, which cannot be adequately replenished, eventually leading to burnout (Bakker & Demerouti, 2007, 2017). Studies found that occupational stress was strongly associated with burnout among physicians in Chinese hospitals, highlighting the importance of interventions aimed at improving the work environment and reducing occupational stress for mitigating burnout, including health education, health-promotion initiatives, and professional training programs (Hui et al., 2013; Xiufeng Jiang et al., 2023).

Extensive research indicated that burnout significantly predicted later “lying flat” levels. Burnout is both an outcome of workload and an antecedent of “lying flat” (Morse et al., 2012). According to the health impairment process in the JD-R model (Bakker & Demerouti, 2017), reduced personal accomplishment would trigger a resource loss spiral, stimulating “lying flat” at work (Hobfoll, 2001). Reduced personal accomplishment deprives psychiatrists of the meaningfulness of work and intrinsic motivation (Schaufeli & Taris, 2014). When psychiatrists perceive their work as ineffective and meaningless, engagement and dedication become unsustainable psychologically, inevitably resulting in “lying flat”. Reduced personal accomplishment reflects an individual’s negative evaluation of work value and self-efficacy, which undermines intrinsic motivation and directly promotes psychological withdrawal (Halbesleben, 2006). Reduced personal accomplishment further decreases employees’ occupational motivation and job satisfaction, resulting in higher levels of “lying flat” (Lasalvia et al., 2009). High levels of patient threats accentuate the predictive power of reduced accomplishment on “lying flat”, because threat experiences increase emotional exhaustion and learned ineffectiveness (Maslach et al., 2001), making psychiatrists with reduced personal

accomplishment more likely to trigger resource protection behaviors, including reduced engagement and psychological withdrawal (Hobfoll, 1989). As psychiatrists face potential impulsive, aggressive, or violent behaviors of patients, they have significantly higher personal safety risk compared to other physicians (J. Johnson et al., 2018). This sustained safety threat depletes their psychological resources (e.g., security and control), requiring additional vigilance demands to mitigate the risk, which increases both physical and mental burden (Kumar, 2007). In addition, intensified emotional labor is related to burnout and “lying flat”, whereas effective emotional regulation strategies can mitigate these negative outcomes (Brotheridge & Grandey, 2002). Moreover, workload and environmental factors were found to significantly affect the prevalence of “lying flat” among healthcare professionals (Dyrbye et al., 2017). High job demands (e.g., prolonged overtime work and role conflict) and limited resources increase burnout and “lying flat”, whereas enhanced psychological capital (e.g., self-confidence, optimism, and resilience) can buffer these effects to a certain extent (Schaufeli & Taris, 2014). Meanwhile, insufficient job resources directly impede the motivational process in the JD-R model. When psychiatrists are unable to gain positive experiences such as support, recognition, growth, or meaningfulness from their work, both their intrinsic and extrinsic motivation will be undermined, making it difficult to sustain vigor and dedication, increasing the likelihood of “lying flat” (Schaufeli & Taris, 2014).

The work environment of psychiatrists is full of challenges, as they face complex, high-risk demands such as patient threats and violence, workload, and role conflict, which continuously deplete their valuable physiological, psychological, cognitive, and environmental resources, such as organizational support and work autonomy. The JD-R model outlines dual pathways: 1) high job demands drive the health impairment process (with burnout as its outcome); 2) low job resources impede the motivational process (with disengagement as its outcome). The COR theory further provides explanations on psychiatrists’ core motivation when facing threatened or actual resource loss: protect remaining resources. It also explains the dual roles of work disengagement in this context: 1) a protective strategy when facing initial resource depletion or threats to resource loss; and 2) an inevitable consequence and external manifestation of severe resource depletion. However, current research has certain limitations, for example, insufficient depth in the analysis of psychiatrists’ job demands and resources, a narrow focus on general outcome variables such as job satisfaction, and limited exploration of the relationships between relevant variables and the mechanisms underlying their influence on burnout. Moreover, there is limited research examining the relationships between burnout and “lying flat”.

2.5 Hypotheses

By reviewing Chinese and international literature on the JD-R theory and the COR theory, we observed that research on “lying flat” (disengagement) developed earlier outside of China. International studies have explored its conceptualization, dimensionality, and antecedents, as well as the relationship between burnout and “lying flat”, forming an influential theoretical system. In contrast, Chinese research on “lying flat” is relatively limited. The few existing studies mostly used the JD-R theory to examine the effects of burnout on turnover intention, job performance, and job satisfaction, seldom addressing “lying flat” at work. In light of that, and based on JD-R theory and the COR theory, this study proposes hypotheses regarding the relationships among job demands, job resources, burnout, and “lying flat”.

According to the MBI, burnout consists of three dimensions: reduced personal accomplishment, depersonalization, and emotional exhaustion (Maslach & Jackson, 1981). This study focuses solely on the reduced personal accomplishment dimension of burnout, given our research purpose and scope. We argue that reduced personal accomplishment serves as a proximal indicator of resource erosion. Reduced personal accomplishment reflects a decline in employees’ perceived competence and achievement at work (Khorfan et al., 2021; West et al., 2018) and is strongly associated with losses in personal resources such as self-efficacy and self-esteem (e.g., Bayani & Baghery, 2020; Janssen et al., 1999). As a psychologically salient signal of resource loss, reduced personal accomplishment is likely to trigger withdrawal-oriented coping tendencies, including “lying flat”.

Within the JD-R framework, job resources such as perceived organizational support and autonomy play a motivational role that protects against burnout (Bakker & Demerouti, 2024; Schaufeli & Bakker, 2004). Adequate job resources bolster employees’ sense of competence and contribution, thereby enhancing personal accomplishment and maintaining key personal resources like self-efficacy and self-esteem that buffer against withdrawal. Accordingly, we propose that reduced personal accomplishment mediates the relationship between job resources and “lying flat”.

The specific hypotheses regarding the relationship among organizational support, work autonomy, and “lying flat” among primary-level psychiatrists are as follows.

2.5.1 Relationship between job resources and “lying flat”

According to the JD-R theory and the COR theory, higher levels of job resources significantly

reduce the tendency toward “lying flat”. Job resources can fulfill individuals’ basic psychological needs (Deci & Ryan, 2000), stimulate work motivation, and buffer stress caused by job demands (Bakker & Demerouti, 2017), thereby reducing withdrawal behaviors driven by resource depletion. Primary-level psychiatrists make full use of available job resources to satisfy their psychological needs (e.g., competence and belongingness), which helps reduce the development of “lying flat”. Therefore, a lack of job resources may lead to “lying flat” (Crawford et al., 2010; Hakanen et al., 2008). According to the motivational process, job resources enhance individuals’ work engagement, which yields positive organizational outcomes, or in other words, prevents negative outcomes. Thus, this study proposes that the job resources available to primary-level psychiatrists can mitigate “lying flat” at work. Given that job resources involve numerous variables, which cannot all be included, this study focuses on organizational support and work autonomy. As key job resources, organizational support and work autonomy can reduce employees’ withdrawal behavior (Kurtessis et al., 2017). Empirical studies confirmed that organizational support negatively predicts “lying flat” and increases work engagement (Yousef et al., 2024).

Based on the motivational process of the JD-R theory, job resources such as organizational support and work autonomy can increase work engagement, whereas existing literature has suggested that organizational support negatively predicts “lying flat”. In addition, work autonomy, as a structural resource (e.g., decision-making power and control over work methods), can satisfy psychiatrists’ need for control over work (Bakker & Demerouti, 2017). When autonomy is deprived, psychiatrists are unable to flexibly adjust treatment plans according to patient needs, resulting in a resource-demand imbalance and triggering “lying flat”. The lack of autonomy forces psychiatrists to continuously deplete cognitive resources to cope with rigid procedures (e.g., mandatory standardized protocols), leading to continued resource depletion, which cannot be replenished, eventually prompting reduced effort as a strategy to retain remaining resources (Hobfoll, 1989). Work autonomy could enhance employees’ sense of responsibility and control, which is conducive to improved work engagement, job satisfaction, and overall job performance while mitigating “lying flat” (Bakker & Demerouti, 2007). A 10% increase in work autonomy would lead to a 15% increase in work engagement, indirectly enhancing customer satisfaction (Xanthopoulou et al., 2009a). Therefore, we propose the following hypotheses:

H1a: *Perceived organizational support is negatively associated with “lying flat”.*

H1b: *Work autonomy is negatively associated with “lying flat”.*

Organizational support can reduce psychiatrists’ psychological pressure and emotional

exhaustion, thereby reducing burnout (Schaufeli & Taris, 2014). In psychiatric care settings, organizational support, as a key job resource, was found to enhance nurses' professional commitment and job satisfaction (Laschinger et al., 2009). Higher organizational support could reduce burnout by alleviating work stress and improving the work environment (Edwards et al., 2000). In addition, by satisfying employees' socio-emotional needs, organizational support could enhance employees' self-efficacy and achievement motivation (Rhoades & Eisenberger, 2002). Conversely, when organizational support is insufficient, psychiatrists are prone to experience effort-reward imbalance, resulting in reduced personal accomplishment (Bakker & Demerouti, 2007). Similarly, work autonomy serves as an "energy converter" that converts psychiatrists' professional capital into treatment outcomes; when this conversion is blocked, psychiatrists would experience frustration and develop the cognition of ineffective effort (Lee & Ashforth, 1996). Psychiatric care involves high uncertainty, requiring psychiatrists to autonomously respond to fluctuating conditions; in this context, a lack of autonomy would increase ineffectiveness (Lasalvia et al., 2009). Higher work autonomy (e.g., control over nursing tasks and schedule) was found to significantly improve personal accomplishment and work engagement while reducing burnout and work stress (Van Bogaert et al., 2013). Therefore, we propose the following hypotheses:

H2a: *Perceived organizational support is negatively associated with reduced personal accomplishment*.

H2b: *Work autonomy is negatively associated with reduced personal accomplishment*.

2.5.2 Mediating effect of reduced personal accomplishment between job resources and "lying flat"

Reduced personal accomplishment is a core dimension of burnout (Maslach et al., 2001) and directly triggers withdrawal behavior (Taris et al., 2010). When psychiatrists are unable to realize their professional value due to limited treatment effectiveness or resource constraints (e.g., limited resources in primary-level psychiatry), they are more likely to "lie flat" (Leiter & Maslach, 2016). Reduced personal accomplishment would activate resource protection strategies (e.g., reduced effort), leading to disengagement (Halbesleben et al., 2014). Reduced personal accomplishment represents depletion of core psychological resources. To prevent further loss, individuals would enter a "resource preservation mode", decreasing emotional input and reducing effort (Hobfoll, 2001). In medical contexts, dimensions of burnout, including depersonalization and reduced personal accomplishment (Maslach et al., 2001), are core behavioral manifestations of "lying flat". Therefore, we propose the following hypothesis:

H3: *Reduced personal accomplishment is positively associated with "lying flat"*.

The JD-R theory suggests that job resources influence behavioral outcomes through psychological states (Schaufeli & Taris, 2014). Insufficient organizational support leads to psychological resource depletion, such as reduced personal accomplishment, which in turn induces "lying flat". This sequential path aligns with the resource loss spiral in the COR theory (Hobfoll, 2001). When employees perceive a decline in organizational support, they may resort to "lying flat" as a way to prevent further resource loss (Rastogi et al., 2018). Work autonomy, as a job resource, influences personal accomplishment through the motivational process and further determines behavioral outcomes (Demerouti et al., 2001). A lack of work autonomy could reduce psychiatrists' motivation by eroding their meaning-making systems; once the meaningfulness of work is undermined, psychiatrists are prone to turnover intentions or passive functioning (J. Johnson et al., 2018). This spiral of resource loss is aligned with the core principle in the COR theory that individuals adopt defensive strategies to retain remaining resources when facing sustained resource depletion (Hobfoll, 2001). Hence, we propose the following hypotheses:

H4a: *Reduced personal accomplishment mediates the relationship between perceived organizational support and "lying flat"*.

H4b: *Reduced personal accomplishment mediates the relationship between work autonomy and "lying flat"*.

2.5.3 Moderating effect of job demands

Patient threats and violence refer to verbal insults, intimidation, physical attack, or property damage experienced by healthcare professionals (e.g., physicians, nurses, and emergency personnel) from patients or their families at work (Arnetz et al., 2017; J. Liu et al., 2019). Patient aggression, as a chronic stressor (Schablon et al., 2012), continuously depletes physicians' cognitive and emotional resources (Xanthopoulou et al., 2007). According to the boost hypothesis in the JD-R model, patient threats and violence represent an intensive stressor that accelerates resource depletion (Hobfoll, 1989), leading to a more pronounced motivational effect of perceived organizational support. When the risk of patient violence is high, physicians will follow safety protocols, such as using patient safety straps to restrain patients (J. Liu et al., 2019). In this situation, work autonomy becomes particularly critical, and its negative association with reduced personal accomplishment is likely to become more salient. Therefore, we propose the following hypotheses.

H5a: *Patient threats and violence accentuate the negative relationship between perceived*

organizational support and reduced personal accomplishment.

H5b: *Patient threats and violence accentuate the negative relationship between work autonomy and reduced personal accomplishment*.

Moreover, excessive workload induces cognitive overload (Meijman & Mulder, 1998). Primary-level psychiatric institutions commonly experience overload due to workforce shortages (L. Zhou et al., 2020). In this context, the motivational effect of organizational support is expected to be stronger. Among high-workload healthcare professionals, the relationship between organizational support and reduced personal accomplishment tends to be more pronounced (Bakker & Demerouti, 2024). Under high workload, physicians encounter "time poverty", which makes work autonomy particularly valuable and its motivational effect more salient. As psychiatrists must handle intensive patient needs, manage complex mental health conditions, and respond to frequent emergencies, they often face a high level of workload. The heavy workload may accentuate the positive effects of job resources such as organizational support and work autonomy in reducing burnout and increasing work engagement. Therefore, we propose the following hypotheses.

H6a: *Workload accentuates the negative relationship between perceived organizational support and reduced personal accomplishment*.

H6b: *Workload accentuates the negative relationship between work autonomy and reduced personal accomplishment*.

Similarly, psychiatrists often face pressures from both clinical treatment and administrative duties (Wu et al., 2013). When role conflict is high, the motivational effects of job resources such as organizational support and work autonomy on reduced personal accomplishment are expected to be stronger. In addition, psychiatrists need to balance direct patient treatment and community intervention program implementation, and the multiple role demands further increase role conflict, which leads to an increased risk of burnout (Edwards et al., 2006). Role conflict forces psychiatrists into continuous cognitive reconciliation, making reduced personal accomplishment more likely to be converted into behavioral withdrawal (Rizzo et al., 1970), resulting in more pronounced effects of organizational support and work autonomy as job resources. Therefore, we propose the following hypotheses.

H7a: *Role conflict accentuates the negative relationship between perceived organizational support and reduced personal accomplishment*.

H7b: *Role conflict accentuates the negative relationship between work autonomy and reduced personal accomplishment*.

2.6 Hypothesized model

Based on the hypotheses proposed above, organizational support and work autonomy are negatively associated with reduced personal accomplishment and “lying flat”; reduced personal accomplishment is positively associated with “lying flat” and mediates the relationships of organizational support and work autonomy with “lying flat”; patient threats and violence, workload, and role conflict accentuate the relationship between organizational support and reduced personal accomplishment, as well as between work autonomy and reduced personal accomplishment. The hypothesized model of this study is shown in Figure 2.1.

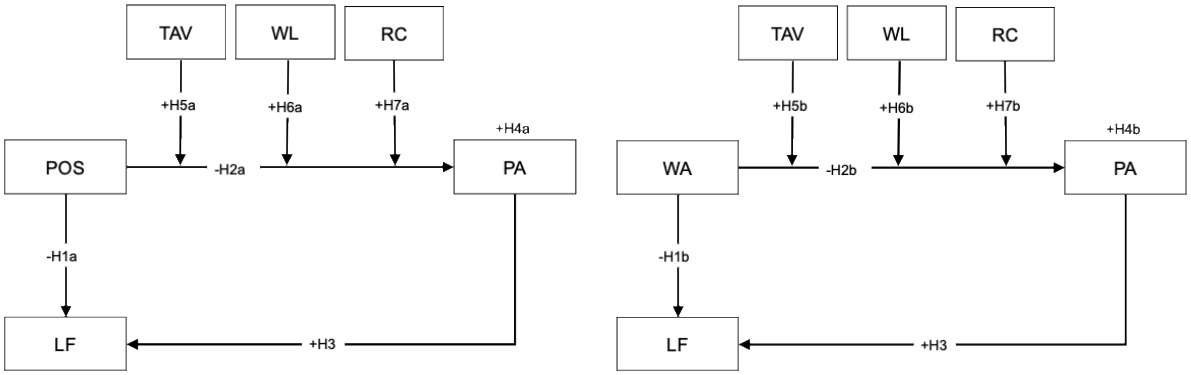


Figure 2.1 Hypothesized model

Note: LF = disengagement (lying flat); PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload.

Chapter 3: Research Methods

This chapter provides a detailed introduction to the research population, sampling method, questionnaire design, data collection procedure, scale selection, and statistical analysis methods. The research population of this study is primary-level psychiatrists in China. The selected psychiatrists from the 12 primary-level psychiatric hospitals are highly representative of this population. The measurement scales used in this study are all well-established scales and were appropriately adapted according to the research participants. In data analysis, SPSSAU 25.0 was used for structural equation modeling (SEM).

3.1 Sample and procedure

3.1.1 Population

The population of this study is primary-level psychiatrists in China. Primary-level psychiatrists are professionals at the frontline of the mental health system who directly interact with patients. Their responsibilities include diagnosis, treatment, rehabilitation, and psychological support for patients. Due to the high level of job demands and relatively limited job resources in their work environment, primary-level psychiatrists face considerable work stress and are prone to burnout and “lying flat”.

Chongqing is located in Western China, with a medium-high level of socioeconomic development. In 2024, its GDP growth rate was 5.7%, higher than the national average of 5%; its per capita GDP was 100,900 RMB (Chongqing Municipal Bureau of Statistics, 2025), slightly higher than the national average of 95,700 RMB (National Bureau of Statistics, 2025). According to the *Chongqing Territorial Spatial Master Plan (2021–2035)*, based on population distribution, geographical location, and socioeconomic conditions, Chongqing is divided into central urban districts, metropolitan new development districts, the southeast ecological protection and development zone, and the northeast ecological conservation and development zone (Chongqing Municipal Urban Planning and Natural Resources Bureau, 2021). Among these areas, the central urban districts are more developed economically, comparable to the developed regions in Eastern China such as Shanghai City and Zhejiang Province; the metropolitan new development districts have socioeconomic levels similar to provinces in

Central China such as Jiangxi and Wuhan; while the socioeconomic conditions of southeast/northeast ecological protection/conservation and development zones are comparable to less-developed provinces in Western China such as Guizhou.

As of December 2023, Chongqing had 1,486 licensed psychiatrists and 19,000 psychiatric beds, with 4.67 psychiatrists per 100,000 permanent residents (Chongqing Municipal Health Commission, 2024). According to statistics from the National Mental Health Project Office, as of December 2023, there were 67,000 registered psychiatrists nationwide, with 4.75 psychiatrists per 100,000 permanent residents (National Mental Health Program Office, 2023). The number of psychiatrists per 100,000 permanent residents in Chongqing is close to the national average. Primary-level psychiatrists in Chongqing are representative of this professional population, making it appropriate to target them as the sample of this study. Excluding psychiatrists in municipal-level healthcare institutions, there are approximately 1,000 psychiatrists working in primary-level mental health institutions in Chongqing. Thus, the target sample consists of about 1,000 individuals who can accurately reflect this population’s occupational status in terms of job demands and job resources.

3.1.2 Sampling method

This study employed a convenience sampling. First, the sampling targeted Chongqing city, which has 40 varied levels of mental health institutions (Chongqing Municipal Health Commission, 2022). Convenience sampling was adopted to focus on the primary level mental health institutions due to our professional networks in these institutions. The purpose of convenience sampling was to obtain a sufficient size of valid sample under limited research resources, by recruiting voluntary participants from mental health institutions with cooperative relationships. A total of 12 primary-level psychiatric hospitals were selected from those willing to participate in the survey, including three in central urban districts, six in metropolitan new development districts, and three in southeast/northeast ecological zones.

3.1.3 Sample size

An appropriate sample size is key to ensuring sufficient statistical power of the results. SEM requires a minimum sample size of 200 and five times the number of measurement items. In this study, the questionnaire contains 43 measurement items, and thus, the minimum required sample size is 215. There are 40 primary-level psychiatric hospitals in Chongqing, and a total of 12 hospitals were selected as sampling units of this study, accounting for 30%. The number

of psychiatrists in each primary-level psychiatric hospital is relatively small, mostly around 20-30 psychiatrists, the smallest having only 17, and the largest only 36. During communication with these hospitals, we emphasized the importance of this study and its potential benefits for improving psychiatrists' working conditions, and thereby received strong support from them. These hospitals made efforts in mobilizing psychiatrists to participate, significantly improved participation rates. Despite the difficulty in access to the psychiatrists for data collection, at the end, we had a valid sample of 232, an adequate sample for SEM analysis.

Among the selected institutions, the participation rate of psychiatrists in Tongliang District Mental Health Center was the highest, reaching 100%, while the lowest participation rate was still as high as 85.7%, in Nan'an District Mental Health Center. Considering the number of primary-level psychiatrists in Chongqing, the target sample size for this study was finally determined to be 297, accounting for approximately 30% of the total number. Details of the sample are shown in Table 3.1.

Table 3.1 Distribution of survey sample

Hospital name	Number of psychiatrists	Number of participants	Ratio of participants to number of psychiatrists
Yuzhong District Mental Health Center	23	21	91.3%
Nan'an District Mental Health Center	21	18	85.7%
Jiangbei District Mental Health Center	31	28	90.3%
Dazu District Mental Health Center	29	27	93.1%
Hechuan District Mental Health Center	31	27	87.1%
Tongliang District Mental Health Center	19	19	100.0%
Tongnan District Mental Health Center	17	16	94.1%
Yongchuan District Mental Health Center	32	28	87.5%
Changshou District Mental Health Center	36	34	94.4%
Nanchuan District Mental Health Center	22	20	90.1%
Kaizhou District Mental Health Center	35	34	97.1%
Fuling District Mental Health Center	28	25	89.3%

3.1.4 Research sample

To objectively understand the "lying flat" behavior of psychiatrists in primary-level psychiatric hospitals, multiple measures were implemented in data collection and bias control to ensure the reliability and external validity of the results. We considered multiple characteristics of the sample, such as tenure, institution, department, and professional title.

The sample covers psychiatrists with different lengths of tenure, ranging from newly onboarded junior psychiatrists to associate chief physicians and even chief physicians with extensive experience. Moreover, the sample was from different primary-level psychiatric institutions. The participants were recruited from a total of 12 psychiatric hospitals. Based on

geographical location and socioeconomic conditions, they include three psychiatric hospitals in central urban districts, six in metropolitan new development districts, and three in southeast/northeast ecological zones of Chongqing, allowing for the analysis of the influence of working conditions on "lying flat" across different regions. Furthermore, the sample includes psychiatrists from various departments of these primary-level psychiatric hospitals, such as psychiatric rehabilitation, child and adolescent psychiatry, general psychiatry, and psychology. In addition, demographic characteristics such as gender, age, marital status, and education level were considered, enabling the examination of their potential associations with the "lying flat" behavior.

The demographic characteristics of the valid sample are shown in Table 3.2. Among the respondents, 37.07% (n = 86) were aged 31-40, and 34.05% (n = 79) were aged 30 or below. Females accounted for the majority, representing 55.60% (n = 129) of the sample. In terms of marital status, 70.69% of the respondents (n = 164) were married, and 25.86% (n = 60) were single.

Table 3.2 Descriptive statistics of demographic characteristics

Characteristics	Categories	Frequency	Percentage (%)	Cumulative %
Gender	Male	103	44.40	44.40
	Female	129	55.60	100.00
Age (years)	30 or below	79	34.05	34.05
	31-40	86	37.07	71.12
	41-50	54	23.28	94.40
	51 or above	13	5.60	100.00
Marital status	Married	164	70.69	70.69
	Single	60	25.86	96.55
	Other (e.g., divorced)	8	3.45	100.00
Education level	Junior college or below	37	15.95	15.95
	Undergraduate	191	82.33	98.28
	Graduate or above	4	1.72	100.00
Professional title	Junior or below	94	40.52	40.52
	Intermediate	114	49.14	89.66
	Associate senior	22	9.48	99.14
	Senior	2	0.86	100.00
Department	General psychiatry	195	84.05	84.05
	Psychiatric rehabilitation	9	3.88	87.93
	Psychology	16	6.90	94.83
	Other psychiatric departments	12	5.17	100.00
Tenure (years)	5 or below	84	36.21	36.21
	6-10	63	27.16	63.36
	11-20	55	23.71	87.07
	21 or above	30	12.93	100.00
Number of beds	≤300	40	17.24	17.24
	301-500	125	53.88	71.12
	501-800	45	19.39	85.34
	≥801	22	9.48	100.00
Total		N = 232	100.0	100.0

Regarding professional title, 49.14% of the respondents (n = 114) held an intermediate title, 40.52% (n = 94) held a junior title or lower, 9.48% (n = 22) held an associate senior title, and 0.86% (n = 2) held a senior title. In terms of education level, respondents with undergraduate education were the majority, accounting for 82.33% (n = 191), while those with graduate education or above accounted for 1.72% (n = 4). Regarding departments, 84.05% of the respondents (n = 195) were working in the general psychiatry department.

In terms of tenure, 36.21% of the respondents (n = 84) had worked for five years or less, 27.16% (n = 63) for 6-10 years, 23.71% (n = 55) for 11-20 years, and 12.93% (n = 30) for 21 years or more. The number of beds in most hospitals ranged between 300 and 800. Hospitals with 301-500 beds accounted for the largest percentage (53.88%, n = 125), while those with 801 beds or more accounted for the smallest percentage (9.48%, n = 22).

3.1.5 Revision and the formal questionnaire

Based on the concerns and problems raised by respondents in the pilot test, we conducted face-to-face communication with them. According to the feedback from the pilot test and after discussions with experts in the relevant field, adjustments were made to the questionnaire items. The way of addressing the respondents was modified, and the wording of the items was adjusted to align with Chinese expression habits, making the statements easier to understand and consistent with the actual situation of primary-level psychiatrists. For example, the item "*Over time, one can become disconnected from this type of work*" was modified to "*Over time, I can become disconnected from this type of work*"; reverse items in the role conflict scale were modified into positive statements. After multiple adjustments, the formal questionnaire was finalized (see the complete questionnaire in the Annex B). The structure of the questionnaire is as follows.

Section I: The job demands scale involves three variables, including three items on patient threats and violence, three items on workload, and six items on role conflict.

Section II: The job resources scale consists of nine items on perceived organizational support and six items on work autonomy.

Section III: This scale addresses work status, including eight items on reduced personal accomplishment and eight items on "lying flat" (disengagement).

Section IV: This section collects respondents' basic information, including gender, age, marital status, professional title, education level, department, tenure in the hospital, number of beds in the hospital, and hospital name, with a total of nine items.

All measurement items in the questionnaire used a 6-point Likert scale, where 1 = "strongly

disagree”, 2 = “disagree”, 3 = “somewhat disagree”, 4 = “somewhat agree”, 5 = “agree”, and 6 = “strongly agree”. Lower scores indicate weaker levels, while higher scores indicate stronger levels. The questions on respondents’ basic information were answered by choosing from categorical options or filling in the blank.

3.1.6 Data collection and quality control

After selecting the sample, data collection was conducted through on-site distribution of paper-and-pencil questionnaires in the cooperating psychiatric hospitals, with guidance and clarification provided. In October 2024, a pilot test was carried out with seven primary-level psychiatrists. Based on their feedback and expert consultation, we revised questionnaire items and finalized the formal questionnaire. The revisions mainly involved adjusting the way of addressing the respondents and refining the wording of the items to align with Chinese language habits and improve clarity and precision. From October 20, 2024 to December 20, 2024, with strong support from the 12 selected primary-level psychiatric hospitals, the formal survey was conducted. We explained the meanings of the items, provided instructions to the participating psychiatrists, and distributed questionnaires on-site. The questionnaires were completed by respondents independently and anonymously. Due to various circumstances, 27 psychiatrists were unable to complete the survey on-site. They received the questionnaire via colleagues and returned it after completion. A total of 310 questionnaires were distributed, and 297 were collected, resulting in a recovery rate of 95.8%. Among them, 232 were valid, and 65 were invalid, yielding an effective response rate of 78.1%.

All respondents received a briefing on informed consent before participating. The survey was conducted through paper-and-pencil questionnaires only. All questionnaires were completed anonymously and independently. In the survey venue, one empty seat was placed between respondents to ensure privacy and avoid interference. We strictly followed ethical standards throughout the research process. The questionnaires were assigned random numbers to ensure participants’ privacy and data security.

All scales used in this study were well-established scales from peer-reviewed literature with demonstrated reliability and validity. They were translated into Chinese through a standardized translation procedure to preserve the meaning of the original content, while ensuring that the Chinese version was aligned with Chinese expression habits and easy to understand in a Chinese context.

In addition, under the supervisor’s guidance, rigorous criteria were established to identify invalid responses to ensure the quality of data analysis. A response was deemed invalid if it met

any of the following criteria: 1) Missing responses to any of the following: gender, age, marital status, professional title, education level, department, tenure at the hospital, number of beds, or hospital name. The aim was to identify the respondents who did not pay full attention when fulling in the questionnaire. 2) Logically inconsistent or counter-common-sense responses regarding age, education level, and tenure. 3) Multiple answers selected for a single item. 4) Missing values. 5) Identical data across respondents. 6) Identical answers for more than 75% of measurement items. If any of these criteria applied, the response was deemed as invalid. Invalid responses were all excluded from data analysis. In addition, a double-checking mechanism by a single reviewer was employed in the screening process to ensure accuracy.

Moreover, the questionnaire was completed anonymously, and a 6-point Likert scale was employed to avoid neutral midpoint options, thus enhancing response clarity and data quality.

3.2 Measurement of variables

Unless otherwise specified, the items were scored on a 6-point Likert scale (from 1 = “strongly disagree” to 6 = “strongly agree”).

3.2.1 “Lying flat” scale

“Lying flat” (disengagement) refers to the phenomenon in which individuals gradually distance themselves from their work and lose interest in it. This concept describes the process in which individuals progressively lose psychological engagement, emotional involvement, and a sense of responsibility toward work tasks. The main scales used to measure “lying flat” include the Utrecht Work Engagement Scale (UWES) and the Oldenburg Burnout Inventory (OLBI).

This study used the OLBI scale, which consists of two dimensions: exhaustion and disengagement (Demerouti et al., 2003). The disengagement dimension contains eight items, such as “*I always find new and interesting aspects in my work*”. Among these, Items 1, 4, 7, and 8 are positively worded items that measure work engagement and therefore needed to be reverse-scored in data analysis.

3.2.2 Reduced personal accomplishment scale

Reduced personal accomplishment refers to an individual’s tendency to negatively evaluate his/her work ability and the values of achievement, manifested as feeling inefficacy at work, lacking a sense of accomplishment, or believing that the contribution is meaningless. This study

used eight items from the Maslach Burnout Inventory (MBI) to measure reduced personal accomplishment (Maslach et al., 1996), such as "*Through my work, I feel that I have a positive influence on people*". All eight items are reverse-coded. Therefore, before conducting data analysis, the answers to all eight items had to be reverse-scored. After reverse scoring, higher scores indicate a stronger level of reduced personal accomplishment.

3.2.3 Perceived organizational support scale

Perceived organizational support refers to the extent to which employees feel cared for, respected, and supported by their organization, as well as the degree to which their efforts are recognized. Perceived organizational support serves as a key job resource that buffers stress and enhances work motivation. This study measured perceived organizational support using nine items from the Perceived Organizational Support (POS) scale developed by Eisenberger et al. (1986), such as "*The organization values my contribution to its well-being*".

3.2.4 Work autonomy scale

Work autonomy refers to the degree of employees' freedom, decision-making authority, and control over work tasks. This study employed the work autonomy scale developed by Breaugh (1999), which includes six items, such as "*I am allowed to decide how to go about getting my job done (the methods to use)*".

3.2.5 Patient threats and violence scale

Patient threats and violence refer to verbal or physical aggressive behaviors directed at psychiatrists by patients or their family members during work. This study used the patient threats and violence scale developed by Sundin et al. (2008), which includes three items covering verbal threats and physical aggression, such as "*I have experienced threats from patients*".

3.2.6 Workload scale

Workload refers to the quantity and difficulty of work tasks and the demands they place on resources. This study used the workload scale in Karasek (1979), which includes three items, such as "*My job requires working fast*".

3.2.7 Role conflict scale

Role conflict describes contradictory duties, unclear responsibilities, or conflicting job demands encountered by individuals in performing job responsibilities, which lead to stress and confusion in the workplace. This study measured role conflict using a 6-item scale covering duties, tasks, and other related aspects (Bowling et al., 2017), such as "*In my job, I often feel like different people are 'pulling me in different directions*"'.

3.3 Data processing and statistical analysis methods

After completing data collection, we first conducted reliability and validity testing. Subsequently, statistical analysis was performed using the online statistical analysis software SPSSAU 25.0, including descriptive statistics, correlation analysis, one-way analysis of variance (one-way ANOVA), and SEM, among others. This study employed SEM to test the hypothesized relationships among job resources, job demands, and "lying flat".

3.3.1 Data processing methods

Data preprocessing is a fundamental step in data analysis, aimed to ensure data quality and consistency. To guarantee the validity of the analysis and the scientific rigor of the results, this study conducted rigorous preprocessing on the data, including handling missing values, detecting obnormal data, and performing reverse scoring. In missing value analysis, if the proportion of missing values is small (e.g., less than 5%), mean imputation can be applied; if missing values are substantial, the corresponding sample should be removed. To ensure the quality of analysis, this study excluded all responses with missing values. For abnormal data, we removed responses with completely duplicated data and those with more than 75% identical answers consecutively across all items. With respect to reverse scoring, all items of the reduced personal accomplishment scale and four items of the "lying flat" scale were reverse-coded: the score of 6 points was converted to 1; the score of 5 was converted to 2; the score of 4 was converted to 3; the score of 3 was converted to 4; the score of 2 was converted to 5; and the score of 1 was converted to 6.

3.3.2 Reliability testing methods

Reliability analysis assesses whether respondents' answers are reliable, in other words, whether respondents provided truthful responses to scale-based questions. This analysis applies only to

quantitative data. A Cronbach’s α coefficient greater than .8 indicates excellent reliability of the scale; when the Cronbach’s α coefficient exceeds .7, it is generally considered to have good internal consistency; if the Cronbach’s α coefficient is above .6, the scale may require revision but is still satisfactory; if it is below .6, the items should be redesigned (Eisinga et al., 2013). The corrected item-total correlation (CITC) of .4 is typically considered an acceptable threshold (Eisinga et al., 2013). If the value of Cronbach’s α increases after an item is deleted, it indicates that removing that item improves the reliability of the scale (Eisinga et al., 2013).

3.3.3 Validity testing methods

Validity testing aims to examine whether the design of the items is reasonable. Exploratory factor analysis (EFA) should be performed at the beginning to assess construct validity, in order to verify whether the relationships between the intended variables and items are consistent with the initial assumptions. If the results of EFA show that the correspondence between factors and items is essentially consistent with expectations, the scale can be considered to have a good level of validity. If the KMO value is greater than .6 and the probability value of Bartlett’s sphericity test is lower than the significance level (.05), the data are considered suitable for factor analysis (Kaiser, 1958). In construct validity analysis, the acceptable threshold for common factor variance is .4, and the acceptable threshold for rotated factor loadings is .4 (Kaiser, 1958).

Subsequently, confirmatory factor analysis (CFA) was conducted to verify the correspondence between factors and measurement items (scale items), and to examine construct validity, convergent validity, and discriminant validity. CFA aims to test the validity of the scale and can also be used to assess common method bias. Construct validity can be evaluated through CFA, and the commonly used indices include the Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), and Comparative Fit Index (CFI) (Hu & Bentler, 1999). As this study employed EFA for construct validity testing, the above indices are therefore not presented. Common indicators of convergent validity include factor loadings and composite reliability (CR): standardized factor loadings generally need to be greater than .4; the CR value usually needs to exceed .6 (J. Zhou & Ma, 2024). Discriminant validity is typically evaluated through the average variance extracted (AVE) and comparison against Pearson correlation coefficients. Typically, the AVE value needs to exceed .5 and be greater than the maximum absolute value of the correlations between factors (J. Zhou & Ma, 2024).

3.3.4 Common method bias testing methods

Common method bias refers to potential errors introduced by the measurement method (e.g., questionnaire survey for data collection). One commonly used strategy for assessing common method bias is EFA, also known as Harman’s single-factor test, in which factor analysis is performed on all measurement items. If the results show that only one factor emerges, or if the first factor explains a substantial proportion of variance (typically more than 50%), common method bias may be present; conversely, if this condition is not met, the common method bias is considered insignificant (J. Zhou & Ma, 2024). Another method for common method bias testing is through CFA, in which all measurement items are loaded onto a single factor for analysis. If model fit indices such as chi-square/df ratio, RMSEA, RMR, and CFI fail to meet criteria, it indicates poor model fit and suggests that the items should not load onto a single factor (i.e., the single-factor model performs poorly. Thus, through common method bias testing, researchers can determine whether there is serious common method bias (J. Zhou & Ma, 2024). This study uses CFA to conduct common method bias testing.

3.3.5 Descriptive statistical analysis methods

Descriptive statistical analysis is used to summarize the basic characteristics of the sample, enabling the researcher to understand the distribution and overall features of the data. This analysis primarily includes analysis of frequency, means, and standard deviations (SDs). In this study, frequency analysis was conducted for sociodemographic characteristics (e.g., gender, age, and educational level) to understand the basic composition of the sample. For key variables (e.g., reduced personal accomplishment and “lying flat”), we calculated means and SDs to describe the central tendency and level of dispersion (Hoaglin et al., 1983).

3.3.6 Correlation analysis methods

Correlation analysis examines the relationships between quantitative variables, including whether the relationship exists and the strength of this relationship (Hauke & Kossowski, 2011). The correlation coefficient is used to represent the association between variables. This correlation analysis first determines whether a relationship exists, then identifies whether the relationship is positive or negative: a correlation coefficient greater than 0 indicates a positive relationship; otherwise, it indicates a negative relationship. Finally, the strength of the relationship is assessed, with coefficients greater than .4 generally indicating a strong association (Hauke & Kossowski, 2011). This study adopted the Pearson correlation coefficient:

the closer the coefficient is to -1 or +1, the stronger the relationship between variables; a coefficient of r = 0 indicates no linear relationship between the variables (Hauke & Kossowski, 2011).

3.3.7 ANOVA methods

The t-test (independent samples t-test) examines whether variable X causes differences in variable Y, where X is categorical data, and Y is quantitative data. In a t-test, the *p*-value is first examined: if the *p*-value is lower than .05, it indicates a significant difference, and the direction of the difference can be determined by comparing the mean values; if the *p*-value is greater than .05, it indicates no significant difference (Ruxton, 2006). In this study, the independent samples t-test was employed to compare the means of two samples drawn from two different groups to infer whether there is significant between-group difference.

Analysis of variance (one-way ANOVA) examines the relationship between categorical and quantitative variables. First, a test for homogeneity of variance is conducted to determine whether the variability of the quantitative variable is consistent across different categories. After confirming homogeneity of variance, ANOVA is conducted to assess significance through the *p*-value. If the result shows significance, it indicates significant differences between the groups, and the direction of the differences can be identified by comparing mean values. The theoretical assumptions of ANOVA require that 1) the dependent variable Y meets normality assumptions and that 2) homogeneity of variance is satisfied. If these assumptions are not met, Welch’s test or the Brown-Forsythe test may be used. As these methods directly address the issue of heterogeneity of variance, they can provide robust results even when the assumption of homogeneity of variance is violated (Bewick et al., 2004). In this study, ANOVA was employed to examine whether demographic characteristics with three or more categories lead to significant differences in the means of the dependent variable.

3.3.8 SEM analysis methods

Structural equation modeling (SEM) is a multivariate data analysis method used to examine the relationships among multiple latent variables. An effective sample size generally needs to exceed 200 and be at least five times the number of measurement items (Kline, 2011). To enhance the robustness of the statistical estimates and to assess their sampling distributions, this study employed Bootstrap resampling with 5,000 iterations of the original sample.

First, a structural equation model was constructed based on theoretical hypotheses. The

model includes the independent variables, dependent variable, mediator, and moderators. the The independent variables include perceived organizational support and work autonomy; the mediator is reduced personal accomplishment; the dependent variable is “lying flat”; and the moderators are workload, patient threats and violence, and role conflict. For model estimation, we employed the maximum likelihood estimation (MLE) method, and model fit was assessed through fit indices such as chi-square/df ratio, CFI, TLI, RMSEA, and SRMR to verify whether the model adequately represents the data structure. If model fit is unsatisfactory, modifications need to be made based on modification indices (MI) by removing paths, deleting measurement items, or adding covariance relationships, to improve the goodness of fit. All modifications must adhere to theoretical justification to avoid data-driven overfitting. Finally, path analysis was conducted to examine the relationships among the variables. SEM consists of two components: the measurement model and the structural model. SEM path analysis enables simultaneous examination of the direct and indirect relationships among multiple variables. For example, in this study, through SEM path analysis, we could examine both the direct effects of job resources on “lying flat” and their indirect effects through reduced personal accomplishment.

In SEM, the commonly used model fit indices include the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), chi-square/df ratio, CFI, TLI, RMSEA, and SRMR (J. Zhou & Ma, 2024). Lower AIC and BIC values indicate better model fit (Hamilton, 1994; Wooldridge, 2019). The chi-square statistic is sensitive to sample size and may reject reasonable models with a large sample (Bentler, 1990). CFI is essentially a deviation-from-independence fit index. It takes model complexity into account and evaluates the degree of incremental improvement in fit by comparing the target model with the “independence model” (i.e., a model in which all variables are uncorrelated). A CFI value greater than .9 indicates a good model fit (Bentler, 1990). TLI is an incremental fit index that incorporates a penalty for model complexity. It compares the specified model with a baseline model (typically the independence model) and evaluates the degree of improvement after adjusting for the number of estimated parameters. A TLI value greater than .9 is generally considered acceptable (Bentler & Bonett, 1980). RMSEA reflects the precision of model fit, that is, the degree to which the model approximates the data. Its value ranges from 0 to 1, with smaller values indicating a better fit. Generally, an RMSEA value below .05 indicates an excellent fit, values between .05 and .08 indicate a good fit, and values above .1 suggest poor model fit (Browne & Cudeck, 1992). As the Root Mean Square Residual (RMR) index is scale-dependent, many scholars recommend SRMR instead (Schumacker & Lomax, 2016). SRMR is the square root of the mean of the standardized residuals and reflects the discrepancy between the model-predicted

covariance matrix and the observed covariance matrix. An SRMR value below .08 is generally considered acceptable. Previous research has clearly indicated that SRMR outperforms the unstandardized RMR and has provided recommended cutoff values, making SRMR the more widely used fit index (Hu & Bentler, 1999).

GFI and the Adjusted Goodness-of-Fit Index (AGFI) are sensitive to sample size and tend to be low with a large sample (Anderson & Gerbing, 1984). Due to their underperformance compared to TLI, CFI, RMSEA, and SRMR, these two indices are less recommended (Hu & Bentler, 1999). Parsimony Goodness-of-Fit Index (PGFI) and Parsimony Normed Fit Index (PNFI) primarily apply a penalty to overly complex models when comparing models with different degrees of freedom, providing a relative perspective, with higher values indicating better performance in terms of parsimony. However, these indices lack strict acceptable criteria (James et al., 1982).

Therefore, this study primarily used indices such as AIC, BIC, chi-square/df ratio, CFI, TLI, RMSEA, and SRMR to evaluate SEM model fit.

3.4 Reliability analysis

Reliability analysis evaluates whether the respondents' answers are reliable, that is, whether they responded to the scale items truthfully. We conducted reliability testing for each variable, and the results showed that the Cronbach's α coefficients ranged from .773 to .967, all exceeding the threshold of .7, indicating good reliability of the survey data. Through Cronbach's α if item deleted, we observed no significant improvement when any item was deleted, suggesting that no item needed to be removed. Regarding CITC values, item LF7 had a CITC value lower than .2, indicating weak correlation with other items. Therefore, it was considered for removal.

After removing item LF7, we repeated the reliability analysis for the "lying flat" scale. The results showed that the Cronbach's α values ranged between .835 and .967, all exceeding .8, indicating excellent reliability. Through the Cronbach's α if item deleted, we again did not observe significant improvement upon deletion of any item, suggesting that no item needed to be removed. In addition, all CITC values ranged from .448 to .900, exceeding .4, demonstrating strong correlations between the items. In summary, the reliability coefficients all exceeded .8, indicating high overall reliability, suggesting the suitability of the data for subsequent EFA and CFA.

During subsequent EFA and CFA (see Section 3.5), a total of 11 items (LF1, LF4, LF8; PA1,

PA3, PA6; POS1, POS9; WA2, WA5; RC2) were removed. Combined with the previously deleted LF7, a total of 12 items were removed (LF1, LF4, LF7, LF8; PA1, PA3, PA6; POS1, POS9; WA2, WA5; RC2). Given this adjustment, another round of reliability analysis was necessary. Therefore, after removing the 12 items, we reconducted reliability testing. As shown in Table 3.3, the Cronbach's α coefficients ranged from .835 to .962, all exceeding .8, indicating good reliability. Through the value of Cronbach's α if item deleted, we observed no significant improvement in the coefficient when any remaining item was removed, suggesting no further item deletion was necessary. All CITC values ranged between .616 and .919, all exceeding .4, indicating strong correlations among items. Overall, the results demonstrated good reliability of the scale.

Table 3.3 Reliability analysis results

Item	CITC	Cronbach's α if item deleted	Cronbach's α
LF2	.769	.896	.912
LF3	.831	.874	
LF5	.825	.876	
LF6	.774	.895	
PA2	.744	.872	.895
PA4	.794	.860	
PA5	.725	.877	
PA7	.765	.866	
PA8	.694	.882	
POS2	.818	.959	.962
POS3	.862	.956	
POS4	.908	.952	
POS5	.886	.954	
POS6	.874	.955	
POS7	.896	.953	
POS8	.814	.959	
WA1	.727	.869	.889
WA3	.777	.850	
WA4	.824	.831	
WA6	.702	.878	
TAV1	.766	.702	.835
TAV2	.730	.744	
TAV3	.616	.849	
WL1	.774	.818	.877
WL2	.805	.789	
WL3	.717	.867	
RC1	.720	.951	.940
RC3	.842	.926	
RC4	.894	.917	
RC5	.919	.913	
RC6	.842	.926	

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload.

3.5 Validity analysis

This study first conducted EFA, followed by CFA, to sequentially assess the construct validity, convergent validity, and discriminant validity of the scale.

3.5.1 Construct validity testing

The construct validity test evaluates the rationality of questionnaire item design. This study adopted EFA to assess data reliability. First, the KMO test was performed. Generally, a KMO value greater than .8 indicates that the data are highly suitable for information extraction, demonstrating meritorious adequacy; a KMO value between .7 and .8 suggests that the data are suitable for information extraction, demonstrating middling adequacy; if the value falls between .6 and .7, the data are still considered acceptable; if the KMO value is below .6, the data are considered unsuitable for factor extraction (when there are only two items, the KMO value is always .5). Subsequently, the correlation between items and factors needs to be analyzed. If the communality value of any item is lower than .4, the item should be considered for deletion (Fabrigar et al., 1999; He, 2012).

The results showed that the KMO values all exceeded .6, indicating suitability for factor analysis. Meanwhile, the data passed Bartlett’s test of sphericity (p = .000 < .05), also demonstrating that the data were suited for factor analysis.

This study used the varimax rotation method to examine the correlation between factors and research variables. The communalities of five items (LF1, LF4, LF8, PA1, and RC2) were lower than .4, indicating weak relationships between these items and their respective factors. That means, the factors could not effectively extract information from these items. Therefore, these five items should be removed, followed by a re-analysis.

After removing LF1, LF4, LF8, PA1, and RC2, we re-conducted EFA. As shown in Table A.3 of Annex A, the KMO values ranged from .695 to .943, all exceeding .6, and the data passed Bartlett’s test of sphericity (p = .000 < .05), meeting the criteria for factor analysis. Using varimax rotation, we examined factor extraction, information extraction, item-factor correspondence, and the relationship between factors and items. As shown in Table A.4 of Annex A, the results indicated that eight factors were extracted: patient threats and violence, workload, role conflict, doctor-patient distrust, organizational support, work autonomy, reduced personal accomplishment, and lying flat. The eigenvalues of these factors ranged from 2.236 to 7.177, all greater than 1; cumulative variance explained ranged from 68.259% to 81.567%, and

the cumulative variance explained after rotation exceeded 60%. As shown in Table 3.4 below, the communalities of the items ranged from .586 to .912, all greater than .4, demonstrating strong associations between the items and factors and indicating effective information extraction. Furthermore, factor loadings ranged from .766 to .955, all exceeding .4, suggesting that each item is associated with its corresponding factor.

Table 3.4 EFA results after rotation

Item	Rotated factor loading							Commonality	Cumulative variance explained %
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7		
LF2	.870							.757	79.130
LF3	.909							.826	
LF5	.906							.821	
LF6	.873							.762	
PA2		.822						.676	68.259
PA3		.811						.657	
PA4		.870						.757	
PA5		.829						.687	
PA6		.817						.668	
PA7		.864						.747	
PA8		.766						.586	
POS1			.889					.790	79.746
POS2			.877					.770	
POS3			.890					.792	
POS4			.925					.856	
POS5			.908					.824	
POS6			.898					.806	
POS7			.920					.847	
POS8			.871					.758	
POS9			.857					.734	
WA1				.797				.635	70.319
WA2				.798				.637	
WA3				.867				.751	
WA4				.883				.779	
WA5				.836				.699	
WA6				.848				.718	
TAV1					.903			.816	75.448
TAV2					.885			.784	
TAV3					.815			.664	
WL1						.901		.812	80.348
WL2						.919		.844	
WL3						.869		.754	
RC1							.809	.654	81.567
RC3							.901	.812	
RC4							.938	.880	
RC5							.955	.912	
RC6							.906	.821	

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload.

3.5.2 Convergent validity and discriminant validity testing

CFA can be used to evaluate convergent validity, discriminant validity, and common method bias. Based on the results of the reliability analysis and EFA, we removed six items (LF1, LF4, LF7, LF8, PA1, RC2), followed by a CFA. The absolute values of the standardized loadings all exceeded .6, far higher than the acceptable threshold of .4, and the results showed statistical significance, indicating strong measurement associations. To evaluate convergent validity, we examined the values of AVE and CR. We performed CFA on the seven factors and 37 measurement items. The results showed that the AVE values of all seven factors were greater than .5, and all CR values exceeded .7, indicating good convergent validity.

In the discriminant validity analysis, the square root of the AVE for “lying flat” was .851, exceeding the highest absolute value of inter-factor correlation of .576; the square root of the AVE for reduced personal accomplishment was .794, exceeding the highest absolute value of inter-factor correlation of .760; for perceived organizational support, the square root of the AVE was .879, exceeding the highest absolute value of inter-factor correlation of .760; for work autonomy, the square root of the AVE was .804, significantly higher than the highest absolute value of inter-factor correlation of .719; for patient threats and violence, the square root of the AVE reached .803, higher than the highest absolute value of inter-factor correlation of .578; the square root of the AVE for workload was .843, exceeding the highest absolute value of inter-factor correlation of .578; for role conflict, the square root of the AVE was .880, exceeding the highest absolute value of inter-factor correlation of .576. These results indicated that the factors demonstrated good discriminant validity.

The MI values can be used to examine the strength of relationships among measurement items, with a value greater than 20 indicating a strong correlation. When an MI value exceeds 20, one item in the highly correlated pair can be removed based on its relationships with other factors and measurement items. In this study, through MI values, we identified six items strongly correlated with other factors and measurement items: PA3, PA6, POS1, POS9, WA2, and WA5. Therefore, these six items were removed. The MI value between items WL2 and WL1 for workload was only slightly above 20. Considering that the workload construct only involved three measurement items (WL1, WL2, WL3), we decided to retain WL1 and WL2. The MI value between POS4 and POS3 was 20.765, only slightly above 20, and thus, there items were also retained.

In this round, we removed six items (PA3, PA6, POS1, POS9, WA2, WA5). Combining with the six items removed based on the reliability and EFA results, a total of 12 items (LF1,

LF4, LF7, LF8, PA1, PA3, PA6, POS1, POS9, WA2, WA5, RC2) were removed. Then, we performed CFA again on the seven factors and 31 items. The effective sample size was 232, exceeding five times the number of measurement items, meeting the sample size requirement. As shown in Table A.5 of Annex A, the absolute values of standardized loadings ranged between .693 and .968, all greater than .4, and the results showed statistical significance (p = .000 < .05), indicating strong measurement associations.

We employed CFA to evaluate the convergent validity of each factor. As shown in Table 3.5, the AVE values of the seven factors ranged between .633 and .724 (all exceeding .5), and the CR values ranged between .844 and .962 (all exceeding .6), demonstrating strong convergent validity of the data in this analysis.

Table 3.5 AVE and CR values

Factor	AVE	CR
LF	.724	.913
PA	.633	.896
POS	.785	.962
WA	.674	.892
TAV	.645	.844
WL	.711	.880
RC	.774	.944

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload.

As shown in Table 3.6, the discriminant validity analysis showed that the square root of the AVE for "lying flat" was .851, exceeding the highest absolute value of inter-factor correlation of .576; the square root of the AVE for reduced personal accomplishment was .796, higher than the highest absolute value of inter-factor correlation of .739; for perceived organizational support, the square root of the AVE was .886, notebly exceeding the highest absolute value of inter-factor correlation of .739; the square root of the AVE for work autonomy reached .821, exceeding the highest absolute value of inter-factor correlation of .687; the square root of the AVE for patient threats and violence was .803, far above the highest absolute value of inter-factor correlation of .578; the square root of the AVE for workload was .843, exceeding the highest absolute value of inter-factor correlation of .578; the square root of the AVE for role conflict was .880, well above the highest absolute value of inter-factor correlation of .576. These results indicated satisfactory discriminant validity of all factors.

Table 3.6 Pearson correlation coefficient and the square root of AVE

	LF	PA	POS	WA	TAV	WL	RC
LF	.851						
PA	.484	.796					
POS	-.502	-.739	.886				
WA	-.283	-.687	.653	.821			
TAV	.262	.163	-.155	-.188	.803		
WL	.324	.051	.011	-.084	.578	.843	
RC	.576	.355	-.407	-.276	.421	.459	.880

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload. The numbers on the diagonal represent the square roots of the AVE values.

3.6 Common method bias analysis

In this study, a total of seven factors correspond to 31 measurement items. We loaded all 31 measurement items onto a single factor for CFA analysis to obtain model fit indices.

As shown in Table 3.7, the chi-square/df ratio was 8.332, far higher than the acceptable threshold of < 3. In addition, the values of GFI, CFI, NFI, and NNFI were all below .5, far lower than the acceptable threshold of > .9. The RMSEA value was .178, not meeting the acceptable threshold of < .1. The SRMR value was .175, not meeting the acceptable threshold of < .1 either. The TLI value was .472, far below the acceptable threshold of > .9. The RMR value was .318, also seriously deviating from the acceptable threshold of < .05 (J. Zhou & Ma, 2024). Other indices, such as AGFI, IFI, PGFI, PNFI, and PCFI, also failed to meet the acceptable criteria. These results indicated extremely poor model fit, suggesting that the measurement items could not be explained by a single factor. The results also indicated no serious common method bias problem (J. Zhou & Ma, 2024).

Table 3.7 Common method bias analysis

Common indices	χ^2	df	*p*	χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Criteria	-	-	>.05	<3	>.9	<.10	<.05	>.9	>.9	>.9
Values	3616.257	434	.000	8.332	.371	.178	.318	.507	.478	.472
Other indices	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA 90% CI		
Criteria	>.9	>.9	>.9	>.5	>.5	>.5	<.1	-		
Values	.472	.281	.510	.324	.446	.473	.175	.159 ~ .186		

Note: In the default model, $\chi^2(465) = 6923.388$, $p = 1.000$; AIC = 92.825, BIC = 306.523.

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Chapter 4: Results

In this chapter, the collected valid responses from the formal survey are integrated. Using SPSSAU 25.0, we conducted descriptive statistical analysis, reliability and validity tests, and one-way analysis of variance (one-way ANOVA) on the "lying flat" behavior of primary-level psychiatrists and its influencing factors. Structural equation modeling (SEM) was then employed to test the hypotheses, examining the effects of job demands such as workload and role conflict on "lying flat", testing the moderating effects of job resources such as perceived organizational support and work autonomy, and evaluating the mediating effect of reduced personal accomplishment.

4.1 Correlation analysis

Pearson correlation analysis was conducted to examine the relationships between "lying flat" (LF) and six other variables: reduced personal accomplishment (PA), perceived organizational support (POS), work autonomy (WA), patient threats and violence (TAV), workload (WL), and role conflict (RC). The strength and direction of the relationships were assessed through the Pearson correlation coefficient.

As shown in Table 4.1, LF was significantly and positively associated with PA (r = .484, p < .01), TAV (r = .262, p < .01), WL (r = .324, p < .01), and RC (r = .576, p < .01). Meanwhile, LF was significantly and negatively associated with POS (r = -.502, p < .01) and WA (r = -.283, p < .01), indicating that POS and WA might operate through different mechanisms from those of the other variables.

Table 4.1 Correlation analysis

			Pearson correlation matrix						
	Mean	*SD*	LF	PA	POS	WA	TAV	WL	RC
LF	2.742	1.109	*(.912)*						
PA	2.378	0.808	.484**	*(.895)*					
POS	4.688	0.909	-.502**	-.739**	*(.962)*				
WA	4.244	0.926	-.283**	-.687**	.653**	*(.889)*			
TAV	4.223	1.379	.262**	.163*	-.155*	-.188**	*(.835)*		
WL	4.384	1.163	.324**	.051	.011	-.084	.578**	*(.877)*	
RC	2.810	1.239	.576**	.355**	-.407**	-.276**	.421**	.459**	*(.940)*

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload; * p < .05, ** p < .01.

PA was significantly and positively associated with TAV (r = .163, p < .05) and RC (r = .355,

$p < .01$). Similar to the relationships observed for LF, PA was significantly and negatively associated with POS ($r = -.739$, $p < .01$) and WA ($r = -.687$, $p < .01$), again suggesting that POS and WA might exert their influence through different mechanisms from those of other variables. It is worth noting that PA was not significantly associated with WL ($r = .051$, $p = .443$). This relationship may warrant further exploration in future research.

4.2 Demographic differences in variables

Respondents with different characteristics may face varying levels of job demands and job resources. In this section, independent samples t-tests and one-way ANOVA were employed to examine whether there were significant differences in job demands and job resources across different groups of gender, age, marital status, professional title, department, tenure, and other characteristics.

4.2.1 One-way ANOVA for education level

We conducted one-way ANOVA to examine whether respondents with different education levels show differences in LF, PA, POS, WA, TAV, WL, and RC. Prior to ANOVA, the homogeneity of variance was tested. The results indicated that the significance levels satisfied the threshold of $p > .05$, suggesting that there were no significant differences in LF, PA, POS, WA, TAV, WL, and RC across groups with different education levels. This satisfied the prerequisite for ANOVA. Therefore, we proceeded with one-way ANOVA to analyze the effect of education level.

The results (see Table 4.2) indicated a statistically significant difference in WA across the three education groups, $F(2, 229) = 3.42$, $p = .034$. This finding suggests that WA differed by education level.

Post hoc comparisons using the Least Significant Difference (LSD) test (see Table A.2 in Annex A) showed that the "graduate or above" group (Group 3) reported significantly higher WA ($M = 5.19$, $SD = 0.94$) than the "undergraduate" group (Group 2; $M = 4.19$, $SD = 0.91$), $p = .031$, mean difference = 1.00, $SE = .46$, Cohen's $d = 1.10$. No other pairwise comparisons were statistically significant. These results indicate that psychiatrists with graduate-level education reported higher levels of work autonomy compared to those with undergraduate education.

For the remaining variables (LF, PA, POS, TAV, WL, and RC), the one-way ANOVA results indicated no statistically significant differences across education groups (all ps > .05),

suggesting that these variables were comparable across levels of education.

Table 4.2 One-way ANOVA for education level

	Education level (mean ± *SD*)			*F*	*p*	Test for homogeneity of variance	
	1.0 (n=37)	2.0 (n=191)	3.0 (n=4)			*F*	*p*
LF	2.58±1.16	2.79±1.10	1.75±0.87	2.229	.110	0.651	.523
PA	2.23±0.81	2.41±0.81	2.20±0.85	0.907	.405	0.082	.921
POS	4.78±0.87	4.65±0.91	5.61±0.49	2.426	.091	0.840	.433
WA	4.45±0.96	4.18±0.91	5.19±0.94	3.421	.034*	0.423	.656
TAV	4.20±1.43	4.26±1.34	2.67±2.26	2.659	.072	1.312	.271
WL	4.41±1.29	4.39±1.12	3.58±2.11	0.967	.382	2.041	.132
RC	2.77±1.43	2.83±1.20	2.40±1.24	0.250	.779	1.487	.228

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload; * $p < .05$, ** $p < .01$.

Additionally, the results (see Table 4.2) showed that no significant differences were found across the three education groups for LF, PA, POS, TAV, WL, and RC, ($p > .05$). This indicates that different education levels did not yield significant differences in these six variables.

4.2.2 Independent samples t-test for gender

We conducted independent samples t-tests to examine whether there were gender differences in LF, PA, POS, WA, TAV, WL, and RC. The results indicated that there were no statistically significant differences between male and female respondents across all seven variables ($p > .05$). This suggests that gender did not result in significant differences in LF, PA, POS, WA, TAV, WL, or RC.

4.2.3 One-way ANOVA for age, marital status, and other characteristics

The homogeneity of variance test showed no significant variance differences ($p > .05$) across different groups of age, marital status, tenure, and number of beds for LF, PA, POS, WA, TAV, WL, and RC. This indicates that the assumptions for ANOVA were met for these variables.

For professional title, no significant variance differences ($p > .05$) were found across different groups for LF, PA, POS, WA, TAV, and RC. This indicates that the prerequisites for ANOVA were satisfied for these six variables. However, the homogeneity of variance assumption was not met for WL, showing significant variability of variance. Therefore, Welch's test was employed in the analysis for WL.

In terms of department, no significant variance differences ($p > .05$) were found across different departments in LF, PA, POS, WA, WL, and RC. This indicates that the variability of variance was not significant for these six variables, meeting the assumption of homogeneity of variance, making ANOVA applicable. However, the homogeneity of variance test for TAV

revealed significant variance differences across departments ($p < .05$), showing significant variability of variance; thus, Welch's test was employed to examine the differences in TAV across departments.

The results showed no statistically significant differences ($p > .05$) in LF, PA, POS, WA, TAV, WL, and RC among different groups of age, marital status, professional title, department, tenure, and number of beds. This indicates that these demographic characteristics did not yield significant differences in these variables.

4.2.4 Summary of differences in variables across demographic groups

The results showed significant differences among different education groups in only one variable: WA ($F = 3.421$, $p = .034$). This indicates that primary-level psychiatrists with different educational backgrounds differ significantly in WA. Post-hoc multiple comparisons further revealed that primary-level psychiatrists with graduate education or above reported significantly higher WA than those with undergraduate education.

However, no significant differences were found across different education groups in the other six variables: LF, PA, POS, TAV, WL, and RC.

Moreover, no significant between-group differences were observed for all seven variables (LF, PA, POS, WA, TAV, WL, and RC) based on gender, age, marital status, professional title, department, tenure, and number of beds.

4.3 Hypothesis testing

This study employed SEM and regression analysis to test the proposed hypotheses.

4.3.1 Comparison of hypothesized models

Based on the hypothesized model in Chapter Two, we constructed two structural equation models to test the main effects and mediation effects. In Model 1 (the POS model), POS serves as the independent variable, PA as the mediator, and LF as the outcome variable; in Model 2 (the WA model), WA serves as the independent variable, PA as the mediator, and LF as the outcome variable.

In addition to the POS and WA models derived from the hypothesized model, alternative POS and WA models were constructed for comparison (see Table 4.3). In the POS alternative model, the path between POS and LF was removed, turning it into a fully mediated model. In

the WA alternative model, the path between WA and LF was removed, resulting in a fully mediated model.

Table 4.3 Comparison of model fit indices

Indices	AIC	BIC	χ^2	*df*	χ^2/df	CFI	TLI	RMSEA	SRMR
Criteria			-	-	<3	>.9	>.9	<.10	<.1
POS hypothesized model	67.974	188.61	235.013	101	2.327	.961	.954	.076	.036
POS alternative model	65.91	183.099	242.459	102	2.377	.959	.952	.077	.049
WA hypothesized model	56.788	156.744	140.547	62	2.267	.962	.953	.074	.048
WA alternative model	54.759	151.267	144.002	63	2.286	.961	.952	.075	.053

Note: POS = perceived organizational support; WA = work autonomy.

For the POS hypothesized model, $\chi^2/df = 2.327$ (< 3) indicated an acceptable fit; CFI = .961 (> .9) and TLI = .953 (> .9) both exceeded the acceptable threshold; RMSEA = .076 (< .10) and SRMR = .036 (< .1)were both below the acceptable threshold. Overall, the POS hypothesized model demonstrated good fit. Compared with the POS hypothesized model, the POS alternative model (fully mediated model) showed an inferior overall fit, with χ^2 increasing from 235.013 to 242.459, χ^2/df increasing from 2.327 to 2.377, CFI decreasing from .961 to .959, TLI decreasing from .954 to .952, RMSEA increasing from .076 to .077, and SRMR increasing from .036 to .049.

For the WA hypothesized model, $\chi^2/df = 2.267$ (< 3) indicated an acceptable fit; CFI = .962 (> .9) and TLI = .954 (> .9) both exceeded the acceptable threshold; RMSEA = .074 (< .10) and SRMR = .048 (< .1) were both below the acceptable threshold. Overall, the WA hypothesized model demonstrated a good fit. Compared with the WA hypothesized model, the WA alternative model (fully mediated model) exhibited a poorer fit, with χ^2 increasing from 140.547 to 144.002, χ^2/df increasing from 2.267 to 2.286, CFI decreasing from .962 to .961, TLI decreasing from .953 to .952, RMSEA increasing from .074 to .075, and SRMR increasing from .048 to .053.

In conclusion, the POS and WA hypothesized models outperformed the fully mediated alternative models.

4.3.2 Models of the relationship between perceived organizational support and "lying flat"

Based on the hypotheses proposed in Chapter Two, we used the SPSSAU software for SEM to examine the relationship between POS and LF. In this model, POS was taken as the independent variable, PA served as the mediator, TAV, WL, and RC were included as moderators, and LF was defined as the dependent variable. We constructed the model to examine the relationships among these variables and test the hypotheses.

4.3.2.1 Main effects

This study employed the maximum likelihood estimation (MLE) for path analysis to examine the relationships among the variables. As shown in Table 4.4 and Figure 4.1, POS negatively affected LF, with a standardized regression coefficient of -.301 (z = -2.747, p = .006 < .05). Therefore, H1a was supported. In addition, POS also negatively influenced PA, with a standardized regression coefficient of -.790 (z = -11.749, p = .000 < .05). Thus, H2a was supported. Moreover, PA positively affected LF, with a standardized regression coefficient of .286 (z = 2.539, p = .011 < .01), supporting H3.

Table 4.4 Regression coefficients of the POS model

X	→	Y	Unstandardized regression coefficient	*SE*	*z* (CR)	*p*	Standardized regression coefficient
POS	→	PA	-.757	.064	-11.749	.000	-.790
POS	→	LF	-.334	.122	-2.747	.006	-.301
PA	→	LF	.331	.131	2.539	.011	.286
POS	→	POS8	.941	.060	15.688	.000	.827
POS	→	POS7	1.025	.056	18.406	.000	.909
POS	→	POS6	.956	.053	17.988	.000	.897
POS	→	POS5	1.012	.054	18.606	.000	.914
POS	→	POS4	1.081	.056	19.205	.000	.930
POS	→	POS3	1.031	.058	17.671	.000	.888
POS	→	POS2	1.000	-	-	-	.831
PA	→	PA8	.783	.063	12.358	.000	.730
PA	→	PA7	.922	.064	14.359	.000	.813
PA	→	PA5	.743	.057	12.950	.000	.755
PA	→	PA4	1.069	.070	15.274	.000	.849
PA	→	PA2	1.000	-	-	-	.826
LF	→	LF6	1.079	.074	14.570	.000	.822
LF	→	LF5	1.105	.069	15.989	.000	.877
LF	→	LF3	1.127	.070	16.044	.000	.879
LF	→	LF2	1.000	-	-	-	.822

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support. "→" indicates a regression effect relationship or measurement relationship; "–" indicates that this serves as the reference.

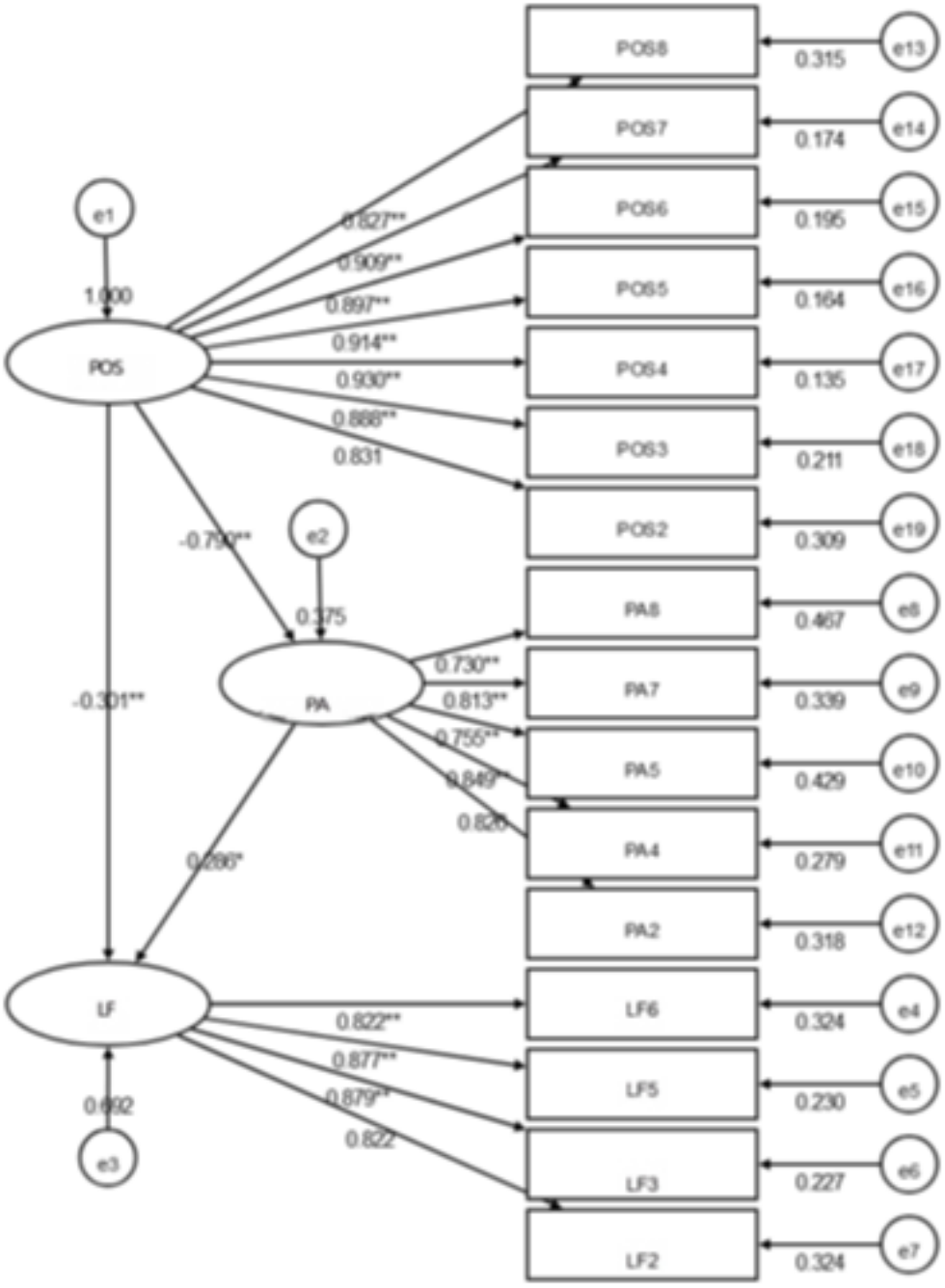


Figure 4.1 Path coefficient diagram of the POS model

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; * $p < .05$, ** $p < .01$.

4.3.2.2 Mediating effect of reduced personal accomplishment

This study used SPSSAU 25.0 for mediating effect analysis. Specifically, we employed the product of coefficients method with 5,000 Bootstrap resamples. The mediating effect test included three models. In Model 1, we conducted regression analysis between the independent variable X and the dependent variable Y to obtain the total effect (c); In Model 2, we performed

regression among the independent variable X, the mediator M, and the dependent variable Y to obtain the direct effect (c′) and the M => Y effect (b); In Model 3, we conducted regression analysis between the independent variable X and the mediator M to obtain the X => M effect (a). The difference between Model 1 and Model 2 lies in the additional mediator M in Model 2. Unless otherwise stated, this method was used for all mediating effect analyses in this study.

With PA as the mediator between POS and LF, the results of the mediating effect testing are shown in Table 4.5. The total effect (c) was -.613, 95% CI = [-.749, -.476], with statistical significance (t = -8.808, p = .000 < .05); the direct effect (c′) was -.389, 95% CI = [-.588, -.190], with statistical significance (t = -3.827, p = .000 < .05); the indirect effect (a*b) was -.224, 95% CI = [-.342, -.037], with statistical significance (t = -2.874, p = .004 < .05); the effect (a) was -.657, with statistical significance (t = -16.646, p = .000 < .05); and the effect (b) was .341, with statistical significance (t = 2.984, p = .003 < .05). Since a, b, and c′ were all significant, and a*b was significant and in the same direction as c′, the results indicated that PA had a partial mediation effect with statistical significance. Therefore, H4a was supported.

Table 4.5 Mediating effect of PA in the POS model

Item	Symbol	Meaning	Effect	95% CI		*SE*	*z*/*t*	*p*	Conclusion
				Lower	Upper				
POS => PA => LF	a*b	Indirect effect	-.224	-.342	-.037	.078	-2.874	.004	
POS => PA	a	X => M	-.657	-.735	-.580	.039	-16.646	.000	
PA => LF	b	M => Y	.341	.117	.565	.114	2.984	.003	Partial mediation
POS => LF	c'	Direct effect	-.389	-.588	-.190	.102	-3.827	.000	
POS => LF	c	Total effect	-.613	-.749	-.476	.070	-8.808	.000	

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support.

4.3.2.3 Moderating effect of patient threats and violence

In the moderating effect analysis, we first centered POS and TAV. Then, TAV was added as a moderator in the path between POS and PA. We conducted regression analysis by loading the data in SPSSAU 25.0 to test the moderating effect. Unless otherwise specified, this method was used for all moderating effect analyses in this study.

As shown in Table 4.6, the moderating effect was examined using three models. In Model 1, we conducted regression analysis between the independent variable POS and the dependent variable PA. On the basis of Model 1, we added the moderator TAV to Model 2, and the interaction term (POS × TAV) was further added to Model 3. Unless otherwise specified, all moderating effect models in this study were constructed following this logic. The moderating effect can be analyzed using two approaches: 1) to examine whether the change in the *F*-value from Model 2 to Model 3 is statistically significant; 2) to assess whether the interaction term in Model 3 is significant. Through these approaches, the presence of a moderating effect can be determined. Unless otherwise specified, this study adopted the second approach to examine moderating effects.

Table 4.6 Moderating effect of TAV in the POS model

		Model 1	Model 2	Model 3
Constant		2.378**	2.378**	2.393**
		(66.447)	(66.481)	(66.774)
POS		-.657**	-.650**	-.652**
		(-16.646)	(-16.281)	(-16.499)
TAV			.029	.008
			(1.110)	(.277)
POS×TAV				.073*
				(2.485)
R^2		.546	.549	.561
Adjusted R^2		.544	.545	.555
F		$F(1,230) = 277.090$, $p = .000$	$F(2,229) = 139.301$, $p = .000$	$F(3,228) = 97.024$, $p = .000$
$\triangle R^2$		.546	.002	.012
$\triangle F$		$F(1,230) = 277.090$, $p = .000$	$F(1,229) = 1.232$, $p = .268$	$F(1,228) = 6.174$, $p = .014$
Simple slope analysis	Moderator level	Mean	High level (+1 SD)	Low level (-1 SD)
	Regression coefficient	-.652	-.551	-.752
	SE	.040	.056	.057
	t	-16.499	-9.834	-13.215
	p	.000	.000	.000
	95% CI	-.729 -.574	-.661 -.441	-.864 -.641

Note: POS = perceived organizational support; TAV = patient threats and violence. The dependent variable is reduced personal accomplishment. * $p < .05$, ** $p < .01$. Values in parentheses are *t*-values.

Model 1 tests the main effect of POS. The results showed a significant negative predictive effect of POS on PA ($B = -.657$, $t = -16.646$, $p < .01$), explaining 54.6% of the variance (R^2

= .546, $F(1,230) = 277.090$, $p < .001$).

On the basis of Model 1, TAV was added to Model 2. The results showed that the effect of POS remained significant ($B = -.650$, $t = -16.281$, $p < .01$), but the main effect of TAV was not significant ($B = .029$, $t = 1.110$, $p = .268$). The explanatory power of the model did not significantly improve ($\Delta R^2 = .002$, $\Delta F(1,229) = 1.232$, $p = .268$).

Model 3 further introduced the interaction term POS × TAV. The effect of the interaction term was statistically significant ($B = .073$, $t = 2.485$, $p = .014$), demonstrating a moderating effect. In addition, the explanatory power of the model improved significantly ($\Delta R^2 = .012$, $\Delta F(1,228) = 6.174$, $p = .014$), and the total variance explained was 56.1% ($R^2 = .561$). The main effect of POS remained significant ($B = -.652$, $t = -16.499$, $p < .01$), while the main effect of TAV was insignificant ($B = .008$, $t = .277$, $p = .782$).

As shown in Table 4.6, the effect of the interaction term POS × TAV was significant ($t = 2.485$, $p = .014 < .05$), and POS had a significant negative effect on PA ($B = -.657$, $t = -16.646$, $p < .01$). The opposite directions of the main effect of POS (negative) and the effect of the interaction term POS × TAV (positive) indicated that under different levels of the moderator TAV, the strength of the effect of POS on PA was significantly different. More specifically, the moderator demonstrated a weakening effect. A simple slope analysis was conducted (see Table 4.6 and Figure 4.2). When TAV was high (+1 SD), the negative effect of POS weakened ($B = -.551$, $SE = .056$, $t = -9.834$, $p < .001$, 95% CI [-.661, -.441]); when TAV was at the mean level, the effect of POS was $B = -.652$ ($SE = .040$, $t = -16.499$, $p < .001$, 95% CI [-.729, -.574]); when TAV was low (-1 SD), the negative effect of POS increased ($B = -.752$, $SE = .057$, $t = -13.215$, $p < .001$, 95% CI [-.864, -.641]). The simple slope results showed that TAV had a moderating effect on the path from POS to PA by weakening this relationship. Therefore, the H5a was not supported.

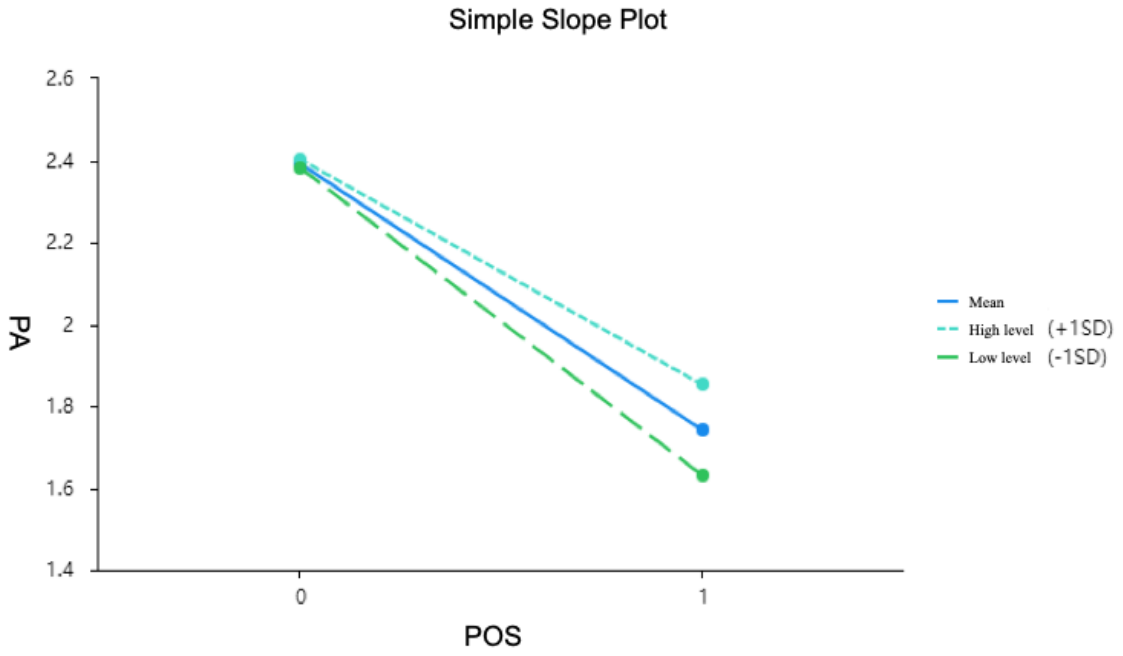


Figure 4.2 Simple slope plot of the moderating effect of TAV

Note: PA = reduced personal accomplishment; POS = perceived organizational support.

4.3.2.4 Moderating effect of workload

In this analysis, both the independent variable and the moderator were centered. WL was introduced into the path between POS and PA as a moderator, and we used SPSSAU 25.0 for moderating effect analysis.

Model 1 aimed to examine the effect of POS on PA without considering the moderating effect of WL. As shown in Table 4.7, the independent variable POS was significantly associated with PA (t = -16.646, p = .000 < .05), indicating a significant effect of POS on PA.

Table 4.7 Moderating effect of WL

	Model 1	Model 2	Model 3
Constant	2.378**	2.378**	2.378**
	(66.447)	(66.554)	(66.807)
POS	-.657**	-.658**	-.654**
	(-16.646)	(-16.686)	(-16.625)
WL		.041	.029
		(1.319)	(.910)
POS×WL			.054
			(1.698)
R^2	.546	.550	.555
Adjusted R^2	.544	.546	.550
F	$F(1,230)$ = 277.090, p = .000	$F(2,229)$ = 139.859, p = .000	$F(3,228)$ = 94.966, p = .000
$\triangle R^2$	.546	.003	.006
$\triangle F$	$F(1,230)$ = 277.090, p=.000	$F(1,229)$ = 1.739, p = .189	$F(1,228)$ = 2.882, p = .091

Note: POS = perceived organizational support; WL = workload. The dependent variable is reduced personal accomplishment. * p < .05, ** p < .01. Values in parentheses are t-values.

As shown in Table 4.7, after adding the interaction term POS × WL (Model 3), the coefficient of the interaction term did not reach statistical significance (B = .054, t = 1.698, p = .091 > .05). The incremental explanatory power of the model (ΔR^2) upon adding the interaction term was .006, and the corresponding ΔF-test also failed to reach statistical significance (p > .05). Therefore, the effect of the interaction term POS × WL was not significant (t = 1.698, p = .091 > .05). Combined with Model 1, the strength of the effect of POS on PA did not differ significantly under different levels of WL. Thus, WL did not exhibit a significant moderating effect on the relationship between POS and PA. Therefore, H6a was not supported.

4.3.2.5 Moderating effect of role conflict

In this analysis, the independent variable and the moderator were centered. RC was introduced as a moderator into the path between POS and PA, and SPSSAU 25.0 was used for moderating effect analysis.

Model 1 aimed to test the main effect of POS. The results showed that POS had a significant negative predictive effect on PA (B = -.657, t = -16.646, p < .01), explaining 54.6% of the total variance (R^2 = .546, F(1,230) = 277.090, p < .001).

On the basis of Model 1, RC was added to Model 2 as a moderator. The effect of POS remained significant (B = -.634, t = -14.691, p < .01), while the main effect of RC was not significant (B = .042, t = 1.338, p = .182). The explanatory power of the model did not significantly improve (ΔR^2 = .004, ΔF(1,229) = 1.789, p = .182).

Model 3 further introduced the interaction term POS × RC based on Model 2. The effect of the interaction term was statistically significant (B = .105, t = 3.732, p < .01), demonstrating a moderating effect. The explanatory power of the model significantly increased (ΔR^2 = .026, ΔF(1,228) = 13.930, p < .001), and the total variance explained was 57.6% (R^2 = .576). The main effect of POS remained significant (B = -.654, t = -15.452, p < .01), while the main effect of RC was insignificant (B = .029, t = .937, p = .350).

As shown in Table 4.8, the effect of the interaction term POS × RC was significant, and POS had a significant negative effect on PA (B = -.654, t = -15.452, p < .01). The opposite directions of the main effect of POS (negative) and the effect of the interaction term POS × RC (positive) indicated that the strength of the effect of POS on PA significantly differed when the moderator RC was at different levels. More specifically, the moderator weakened this relationship. Subsequently, a simple slope analysis was conducted. As shown in Table 4.8 and Figure 4.3, when RC was at a high level (+1 SD), the negative effect of POS weakened

significantly (B = -.524, SE = .051, t = -10.221, p < .001, 95% CI [-.624, -.423]); when RC was at the mean level, the effect was B = -.654 (SE = .042, t = -15.452, p < .001, 95% CI [-.737, -.571]); when RC was at a low level (-1 SD), the negative effect of POS increased significantly (B = -.784, SE = .058, t = -13.487, p < .001, 95% CI [-.898, -.670]). The simple slope analysis showed that RC had a moderating effect on the path from POS to PA by weakening the relationship. Therefore, H7a was not supported.

Table 4.8 Moderating effect of RC in the POS model

		Model 1	Model 2	Model 3
Constant		2.378**	2.378**	2.426**
		(66.447)	(66.561)	(65.490)
POS		-.657**	-.634**	-.654**
		(-16.646)	(-14.691)	(-15.452)
RC			.042	.029
			(1.338)	(.937)
POS×RC				.105**
				(3.732)
R^2		.546	.550	.576
Adjusted R^2		.544	.546	.570
F		F(1,230) = 277.090,	F(2,229) = 139.915,	F(3,228) = 103.187,
		p =.000	P = .000	p = .000
$\triangle R^2$		.546	.004	.026
$\triangle F$		F(1,230) = 277.090,	F(1,229) = 1.789,	F(1,228) = 13.930,
		p = .000	p = .182	p = .000
Simple slope analysis	Moderator level	Mean	High level (+1 SD)	Low level (-1 SD)
	Regression coefficient	-.654	-.524	-.784
	SE	.042	.051	.058
	t	-15.452	-10.221	-13.487
	p	.000	.000	.000
	95% CI	-.737	-.624	-.898
		-.571	-.423	-.670

Note: POS = perceived organizational support; RC = role conflict. The dependent variable is reduced personal accomplishment. * p < .05, ** p < .01. Values in parentheses are t-values.

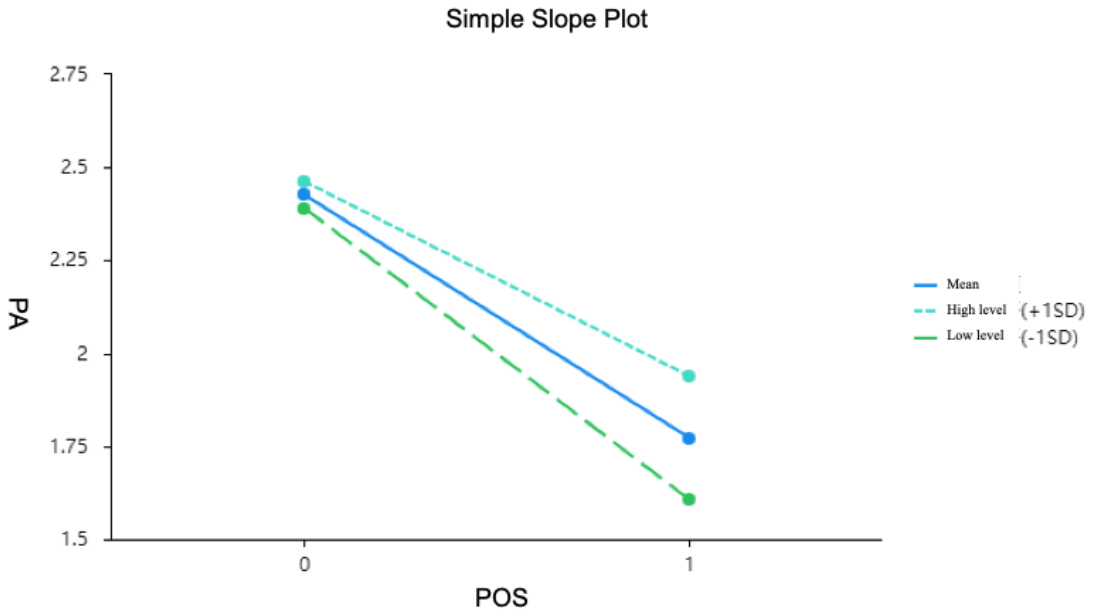


Figure 4.3 Simple slope plot of the moderating effect of RC

Note: PA = reduced personal accomplishment; POS = perceived organizational support.

4.3.3 Model of the relationship between work autonomy and “lying flat”

In this analysis, WA was set as the independent variable, PA as the mediator, TAV, WL, and RC as moderators, and LF as the dependent variable. We used SPSSAU 25.0 for SEM to assess the model fit and examine the relationships among variables.

4.3.3.1 Testing of hypothesized relationships

This study employed the MLE method for path analysis to examine the relationships among variables. As shown in Table 4.9 and Figure 4.4, WA had no significant effect on LF, with a standardized regression coefficient of .210 (z = 1.857, p = .063 > .05). Therefore, H1b was not supported. Moreover, WA had a significant effect on PA (p = .000 < .01), and the direction of this effect was negative (coefficients greater than zero indicate positive effects, whereas negative coefficients indicate negative effects), with a standardized regression coefficient of -.762 (z = -10.196, p = .000 < .05). Thus, H2b was supported. Furthermore, PA significantly and positively affected LF, with a standardized regression coefficient of .684 (z = 7.374, p = .000 < .01), supporting H3.

Table 4.9 Regression coefficients of the WA model

X	→	Y	Unstandardized regression coefficient	*SE*	*z* (CR)	*p*	Standardized regression coefficient
WA	→	PA	-.762	.075	-10.196	.000	-.762
WA	→	LF	.247	.133	1.857	.063	.210
PA	→	LF	.802	.141	5.679	.000	.684
WA	→	WA6	.972	.077	12.619	.000	.788
WA	→	WA4	1.148	.080	14.402	.000	.884
WA	→	WA3	1.066	.079	13.458	.000	.831
WA	→	WA1	1.000	-	-	-	.776
PA	→	PA8	.796	.065	12.285	.000	.733
PA	→	PA7	.929	.066	14.063	.000	.810
PA	→	PA5	.748	.059	12.707	.000	.752
PA	→	PA4	1.097	.072	15.297	.000	.861
PA	→	PA2	1.000	-	-	-	.816
LF	→	LF6	1.083	.074	14.543	.000	.823
LF	→	LF5	1.104	.070	15.848	.000	.874
LF	→	LF3	1.133	.071	16.064	.000	.883
LF	→	LF2	1.000	-	-	-	.821

Note: LF = lying flat; PA = reduced personal accomplishment; WA = work autonomy. "→" indicates a regression effect relationship or measurement relationship; "–" indicates that this serves as the reference.

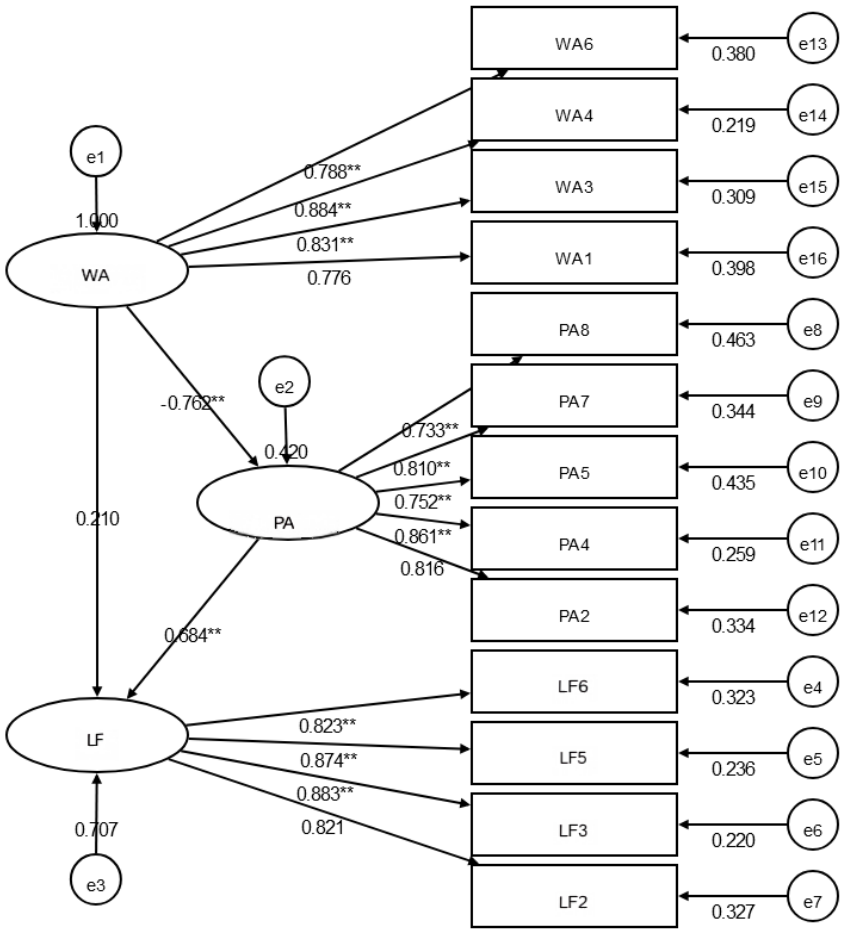


Figure 4.4 Path coefficient diagram of the WA model

Note: LF = lying flat ; PA = reduced personal accomplishment; WA = work autonomy; * $p < .05$, ** $p < .01$.

4.3.3.2 Mediating effect of reduced personal accomplishment

In this analysis, PA was introduced as the mediator in the path from WA to LF. The mediating effect testing results are shown in Table 4.10. The total effect (c) was -.338 and statistically significant (t = -4.469, p = .000 < .05). The direct effect (c′) was .113 and not significant (t = 1.193, p = .234 > .05). The indirect effect (a*b) was -.452 and statistically significant (t = -7.837, p = .000 < .05), with a bootstrapped 95% CI of [-.494, -.266]. The effect (a) was –.600 (t = -14.350, p = .000 < .05), and the effect (b) was .754 (t = 6.918, p = .000 < .05). Since a and b were both significant, c′ was not significant, and the indirect effect a*b was significant (95% CI [-.494, -.266], not including zero) and had the same direction as c (both negative), the mediating effect of PA between WA and LF was confirmed to be significant (effect size = -.452) and was full mediation. Therefore, H4b was supported.

Table 4.10 Mediating effect of PA in the WA model

Item	Symbol	Meaning	Effect	95% CI		*SE*	*z*/*t*	*p*	Conclusion
				Lower	Upper				
WA => PA => LF	a*b	Indirect effect	-.452	-.494	-.266	.058	-7.837	.000	
WA => PA	a	X => M	-.600	-.682	-.518	.042	-14.350	.000	
PA => LF	b	M => Y	.754	.540	.967	.109	6.918	.000	Full mediation
WA => LF	c'	Direct effect	.113	-.073	.300	.095	1.193	.234	
WA => LF	c	Total effect	-.338	-.487	-.190	.076	-4.469	.000	

Note: LF = lying flat; PA = reduced personal accomplishment; WA = work autonomy.

4.3.3.3 Moderating effect of patient threats and violence

In this analysis, we first centered WA and TAV. Then, TAV was added as a moderator in the path from WA to PA, and SPSSAU 25.0 was used for moderating effect analysis.

Model 1 aimed to examine the main effect of WA. The results showed that WA had a significant negative predictive effect on PA (B = -.600**, t = -14.350**, p < .01), explaining 47.2% of the total variance (R^2 = .472, F(1,230) = 205.917**, p < .001).

On the basis of Model 1, we further added the moderator TAV to construct Model 2. The effect of WA remained significant (B = -.594, t = -13.944, p < .01), while the main effect of TAV was not significant (B = .021, t = .731, p = .465). The explanatory power of the model did not significantly improve ($\triangle R^2$ = .001, $\triangle F$(1,229) = .535, p = .465).

Model 3 introduced the interaction term WA × TAV based on Model 2. The effect of the interaction term showed statistical significance (B = .073, t = 2.615, p < .05), indicating the presence of a moderating effect. The explanatory power of the model significantly improved ($\triangle R^2$ = .015, $\triangle F$(1,228) = 6.838, p = .01), and the total variance explained was 48.9% (R^2 = .489). The main effect of WA remained significant (B = -.595, t = -14.149, p < .01), while the main effect of TAV was not significant (B = -.007, t = -.218, p = .782).

As shown in Table 4.11, the effect of the interaction term WA × TAV was significant (t = 2.615, p = .010 < .05), and WA had a significant negative effect on PA (B = -.600, t = -14.350, p < .01). The opposite directions of the main effect of WA (negative) and the effect of the interaction term WA × TAV (positive) indicated that the strength of the effect of WA on PA significantly differed when the moderator TAV was at different levels, demonstrating a weakening moderating effect. Subsequently, a simple slope analysis was conducted. As shown in Table 4.11 and Figure 4.5, when TAV was at a high level (+1 SD), the negative effect of WA weakened significantly (B = -.495, SE = .057, t = -8.752, p < .001, 95% CI [-.606, -.384]); when TAV was at the mean level, the effect of WA was B = -.595 (SE = .042, t = -14.149, p < .001, 95% CI [-.678, -.513]); and when TAV was at a low level (-1 SD), the negative effect of WA increased significantly (B = -.695, SE = .057, t = -12.155, p < .001, 95% CI [-.807, -.583]). The simple slope analysis showed that TAV had a moderating effect in the path from WA to PA by weakening this relationship. Therefore, H5b was not supported.

Table 4.11 Moderating effect of TAV in the WA model

		Model 1	Model 2	Model 3
Constant		2.378**	2.378**	2.396**
		(61.608)	(61.546)	(61.855)
WA		-.600**	-.594**	-.595**
		(-14.350)	(-13.944)	(-14.149)
TAV			.021	-.007
			(.731)	(-.218)
WA×TAV				.073**
				(2.615)
R^2		.472	.474	.489
Adjusted R^2		.470	.469	.482
F		$F(1,230) = 205.917$,	$F(2,229) = 103.017$,	$F(3,228) = 72.708$,
		$p = .000$	$p = .000$	$p = .000$
$\triangle R^2$		.472	.001	.015
$\triangle F$		$F(1,230) = 205.917$,	$F(1,229) = .535$,	$F(1,228) = 6.838$,
		$p = .000$	$p = .465$	$p = .010$
Simple slope analysis	Moderator level	Mean	High level (+1 SD)	Low level (-1 SD)
	Regression coefficient	-.595	-.495	-.695
	SE	.042	.057	.057
	t	-14.149	-8.752	-12.155
	p	.000	.000	.000
	95% CI	-.678	-.606	-.807
		-.513	-.384	-.583

Note: TAV = patient threats and violence; WA = work autonomy. The dependent variable is reduced personal accomplishment. * $p < .05$, ** $p < .01$. Values in parentheses are *t*-values.

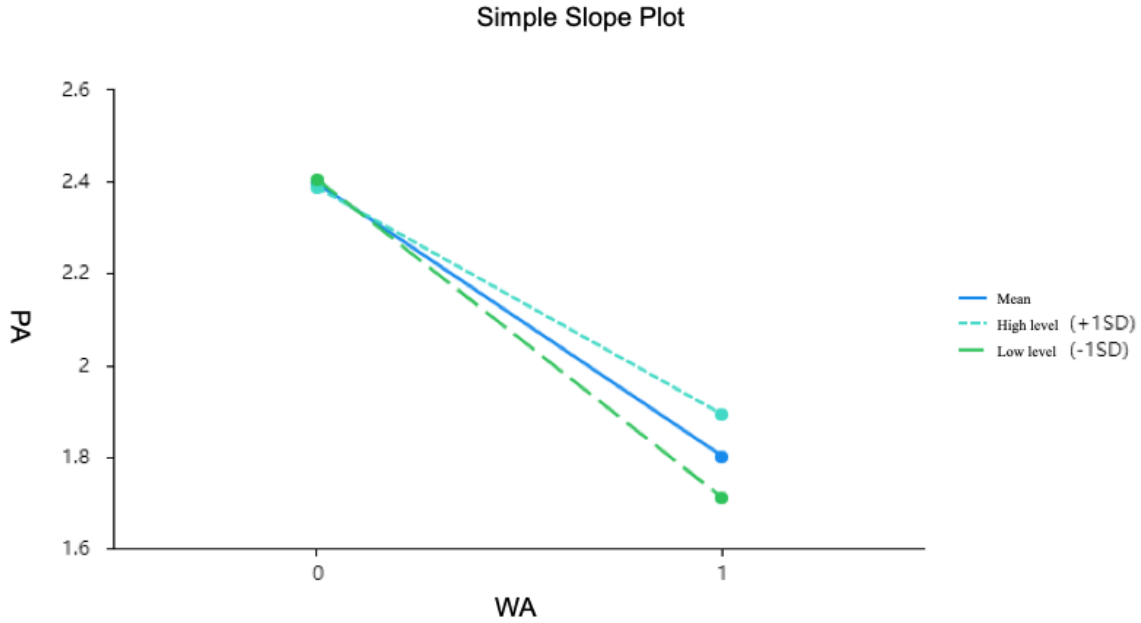


Figure 4.5 Simple slope plot of the moderating effect of TAV

Note: PA = reduced personal accomplishment; WA = work autonomy.

4.3.3.4 Moderating effect of workload

In this analysis, we first centered WA and WL. Then WL was introduced as a moderator into

the path from WA to PA, and we used SPSSAU 25.0 for the moderating effect analysis.

Model 1 aimed to examine the main effect of WA. The results showed that WA had a significant negative predictive effect on PA (B = -.600, t = -14.350, p < .01), explaining 47.2% of the total variance (R^2 = .472, F(1,230) = 205.917, p < .001).

On the basis of Model 1, we further added the moderator WL to construct Model 2. The effect of WA remained significant (B = -.600, t = -14.281, p < .01), but the main effect of WL was not significant (B = -.005, t = -.155, p = .877). The explanatory power of the model did not significantly improve ($\triangle R^2$ = .000, $\triangle F$(1,229) = .024, p = .877).

Model 3 incorporated the interaction term WA × WL on the basis of Model 2. The effect of the interaction term was statistically significant (B = .091, t = 2.996, p = .003), indicating a moderating effect. The explanatory power of the model improved significantly ($\triangle R^2$ = .020, $\triangle F$(1,228) = 8.979, p = .003), with the total variance explained reaching 49.2% (R^2 = .492). The main effect of WA remained significant (B = -.607, t = -14.670, p < .01), while the main effect of WL was not significant (B = -.035, t = -1.007, p > .05).

As shown in Table 4.12, the effect of the interaction term WA × WL was significant (t = 2.996, p = .003 < .05), and WA had a significant negative effect on PA (B = -.600, t(230) = -14.350, p < .01). The opposite directions of the main effect of WA (negative) and the effect of the interaction term WA × WL (positive) indicated that the strength of the effect of WA on PA significantly differed when the moderator WL was at different levels. Specifically, WL had a moderating effect by weakening the relationship. Then, simple slope analysis was conducted. As shown in Table 4.12 and Figure 4.6, when WL was at a high level (+1 SD), the negative effect of WA weakened significantly (B = -.501, SE = .053, t = -9.459, p < .001, 95% CI [-.605, -.397]); when WL was at the mean level, the effect of WA was B = -.607 (SE = .041, t = -14.670, p < .001, 95% CI [-.688, -.526]); when WL was at a low level (-1 SD), the negative effect of WA increased significantly (B = -.713, SE = .056, t = -12.757, p < .001, 95% CI [-.823, -.603]). The simple slope analysis therefore showed that WL moderated the path from WA to PA by weakening this effect. Thus, H6b was not supported.

Table 4.12 Moderating effect of WL

	Model 1	Model 2	Model 3
Constant	2.378**	2.378**	2.387**
	(61.608)	(61.477)	(62.592)
WA	-.600**	-.600**	-.607**
	(-14.350)	(-14.281)	(-14.670)
WL		-.005	-.035
		(-.155)	(-1.007)
WA×WL			.091**
			(2.996)

		Model 1	Model 2	Model 3
R^2		.472	.472	.492
Adjusted R^2		.470	.468	.486
F		$F(1,230) = 205.917$, $p = .000$	$F(2,229) = 102.534$, $p = .000$	$F(3,228) = 73.730$, $p = .000$
$\triangle R^2$		.472	.000	.020
$\triangle F$		$F(1,230) = 205.917$, $p = .000$	$F(1,229) = .024$, $p = .877$	$F(1,228) = 8.979$, $p = .003$
Simple slope analysis	Moderator level	Mean	High level (+1 SD)	Low level (–1 SD)
	Regression coefficient	-.607	-.501	-.713
	SE	.041	.053	.056
	t	-14.670	-9.459	-12.757
	p	.000	.000	.000
	95% CI	-.688	-.605	-.823
		-.526	-.397	-.603

Note: WA = work autonomy; WL = workload. The dependent variable is reduced personal accomplishment. * $p < .05$, ** $p < .01$. Values in parentheses are *t*-values.

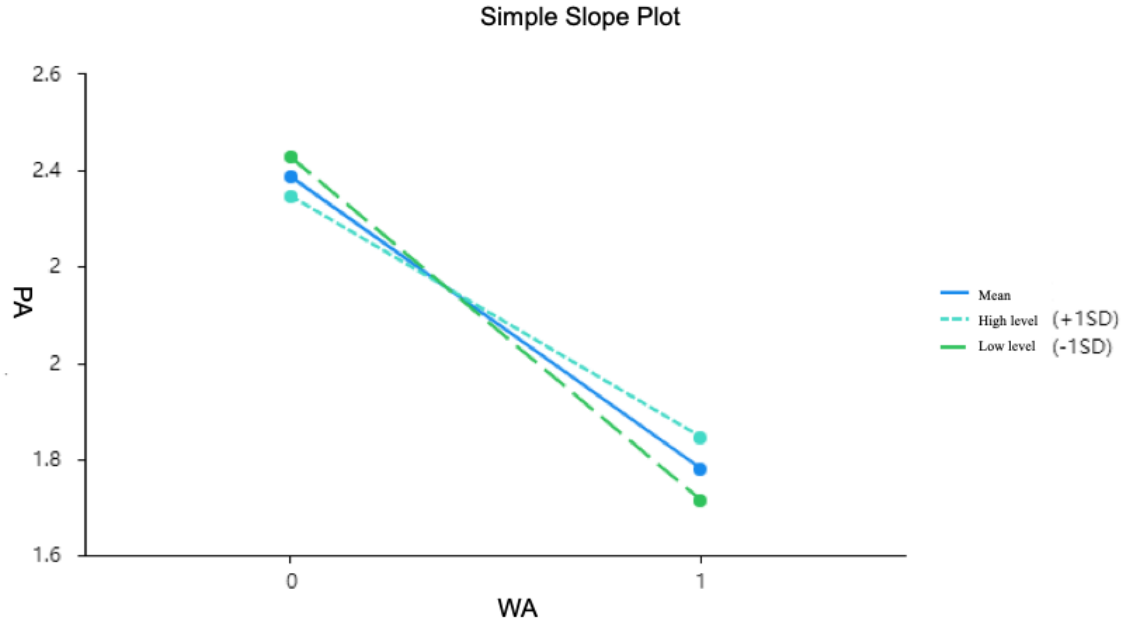


Figure 4.6 Simple slope plot of the moderating effect of WL

Note: PA = reduced personal accomplishment; WA = work autonomy.

4.3.3.5 Moderating effect of role conflict

We first centered WA and RC. Then, RC was introduced as a moderator into the path between WA and reduced PA, and a moderating effect analysis was conducted using SPSSAU 25.0.

As shown in Table 4.13, Model 1 aimed to examine the effect of the independent variable WA on the dependent variable PA without considering the influence of the moderator RC. The results showed that the independent variable (WA) had a significant effect ($t = -14.350$, $p = .000 < .05$), indicating that WA significantly affected PA. After adding the interaction term WA × RC (Model 3), the coefficient of the interaction term failed to reach stasstical significance ($B = .039$,

t = 1.404, p > .05). The incremental explanatory power of the model (ΔR^2) after adding the interaction term was .004, and the ΔF test did not yield statistical significance. The effect of the interaction term WA × RC was not significant (t = 1.404, p > .05). This indicates that the strength of the effect of WA on PA did not change significantly when the moderator RC was at different levels. Therefore, RC did not significantly moderate the effect of WA on PA, and H7b was not supported.

Table 4.13 Moderating effect of RC in the WA model

	Model 1	Model 2	Model 3
Constant	2.378**	2.378**	2.391**
	(61.608)	(63.261)	(62.055)
WA	-.600**	-.557**	-.557**
	(-14.350)	(-13.146)	(-13.187)
RC		.116**	.109**
		(3.676)	(3.409)
WA×RC			.039
			(1.404)
R^2	.472	.502	.506
Adjusted R^2	.470	.497	.500
F	F(1,230) = 205.917,	F(2,229) = 115.315,	F(3,228) = 77.860,
	p = .000	p = .000	p = .000
$\triangle R^2$	.472	.029	.004
$\triangle F$	F(1,230) = 205.917,	F(1,229) = 13.512,	F(1,228) = 1.972,
	p = .000	p = .000	p = .162

Note: RC = role conflict; WA = work autonomy. The dependent variable is reduced personal accomplishment. * p < .05, ** p < .01. Values in parentheses are t-values.

4.4 Summary of hypothesis testing results

This study used SPSSAU 25.0 to examine the direct effects, mediating effects, and moderating effects in the theoretical model and tested the hypotheses proposed in this study. The hypothesis testing results are summarized in the Table 4.14.

Table 4.14 Summary of hypothesis testing results

No.	Hypotheses	Testing results
H1a	*Perceived organizational support is negatively associated with "lying flat".*	Supported
H1b	*Work autonomy is negatively associated with "lying flat".*	Not Supported
H2a	*Perceived organizational support is negatively associated with reduced personal accomplishment.*	Supported
H2b	*Work autonomy is negatively associated with reduced personal accomplishment.*	Supported
H3	*Reduced personal accomplishment is positively associated with "lying flat".*	Supported
H4a	*Reduced personal accomplishment mediates the relationship between perceived organizational support and "lying flat".*	Supported
H4b	*Reduced personal accomplishment mediates the relationship between work autonomy and "lying flat".*	Supported

No.	Hypotheses	Testing results
H5a	*Patient threats and violence accentuate the negative relationship between perceived organizational support and reduced personal accomplishment.*	Not supported
H5b	*Patient threats and violence accentuate the negative relationship between work autonomy and reduced personal accomplishment.*	Not supported
H6a	*Workload accentuates the negative relationship between perceived organizational support and reduced personal accomplishment.*	Not supported
H6b	*Workload accentuates the negative relationship between work autonomy and reduced personal accomplishment.*	Not supported
H7a	*Role conflict accentuates the negative relationship between perceived organizational support and reduced personal accomplishment.*	Not supported
H7b	*Role conflict accentuates the negative relationship between work autonomy and reduced personal accomplishment.*	Not supported

Chapter 5: Discussion and Conclusions

This chapter briefly reviews the research process. This study found that perceived organizational support was directly and negatively associated with “lying flat” among primary-level psychiatrists, and indirectly influenced “lying flat” through reduced personal accomplishment. In addition, work autonomy affected “lying flat” only through reduced personal accomplishment. This study also examined the moderating effects of patient threats and violence, workload, and role conflict. By integrating multiple theories, with a focus on primary-level psychiatrists, this study revealed differentiated mechanisms of mediation and moderation, achieving innovative breakthroughs in theoretical framework, variable relationships, and research subjects. It constructed an integrated model of “resources – depletion – adaptation”, providing a new paradigm for research on occupational mental health mechanisms, and proposed coping strategies to mitigate “lying flat”. In addition, this study also recognized its limitations, such as unrefined dimensions of job resources and demands. Future research is suggested to further refine the research by considering multiple dimensions of resources and demands, exploring the sequential mediation and nonlinear moderation mechanisms, and adopting longitudinal designs to verify the causal relationships.

5.1 Discussion

This study revealed that perceived organizational support was negatively associated with reduced personal accomplishment and “lying flat” among primary-level psychiatrists; work autonomy was negatively associated with reduced personal accomplishment; reduced personal accomplishment was positively related to “lying flat”; reduced personal accomplishment partially mediated the relationship between perceived organizational support and “lying flat”; patient threats and violence moderated the relationship between perceived organizational support and reduced personal accomplishment by weakening this effect; and role conflict also weakened the relationship between perceived organizational support and reduced personal accomplishment; reduced personal accomplishment fully mediated the relationship between work autonomy and “lying flat”; patient threats and violence moderated the relationship between work autonomy and reduced personal accomplishment by weakening this effect; and workload also weakened the relationship between work autonomy and reduced personal

accomplishment.

5.1.1 Review of the research process

The development of the healthcare sector requires a high-quality workforce of psychiatric specialists. However, in reality, the phenomenon of “lying flat” is widespread among primary-level psychiatrists. In the face of this challenge, this study was carried out with the aim of providing a theoretical framework and practical solutions to address the “lying flat” among the high-quality workforce. This study adopted an empirical research design based on a questionnaire survey. Applying the Job Demands-Resources (JD-R) theory and Conservation of Resources (COR) theory, we constructed a theoretical model, determined the measurement dimensions for the variables, and established structural equation models to examine the relationships between job resources and “lying flat”, the mediating effect of reduced personal accomplishment between job resources and “lying flat”, and the moderating effect of job demands in the relationships between job resources and reduced personal accomplishment.

The theoretical framework of this study includes the JD-R theory and COR theory. The JD-R model includes two paths: the health impairment process and the motivational process (Demerouti et al., 2001). In the health impairment process, high job demands (e.g., workload and role conflict) lead to resource depletion, resulting in negative outcomes such as burnout (Demerouti et al., 2001). In the motivational process, sufficient job resources (e.g., organizational support and work autonomy) promote work engagement and enhance job performance and well-being. Through this dual-path model, the theory explains the dynamic effect of job design on individuals’ work states (Demerouti et al., 2001). High levels of resource stimulates individuals’ engagement, creating a virtuous cycle of competence enhancement and resource accumulation; however, prolonged exposure to highly stressful environments causes continous resource depletion, weakening individuals’ coping capacity. The COR theory emphasizes the essential role of resources in driving individual behavior and psychology. The impact of resource loss is significantly more pronounced than equivalent gains, and individuals tend to actively invest resources to prevent losses (Hobfoll, 1989). Based on the JD-R and COR theoretical frameworks, this study provided operational definitions for core concepts such as “lying flat”, burnout, job demands, and job resources, and proposed a series of hypotheses on the relationships between job resources and “lying flat”, the mediating effect of reduced personal accomplishment, and the moderating effect of job demands. Statistical tools such as structural equation modeling (SEM) and regression analysis were employed to test the hypotheses.

In terms of demographic characteristics, the sample was mainly composed of respondents aged 31-40, female, married, holding intermediate professional titles, with undergraduate education, and working in general psychiatry departments. The results showed that demographic characteristics such as education level, gender, age, marital status, professional title, department, tenure, and number of beds in the hospital did not significantly affect the level of “lying flat” among primary-level psychiatrists, indicating no statistically significant differences in “lying flat” across demographic groups. This suggests that “lying flat” may be a widespread phenomenon among primary-level psychiatrists. Considering that the sample came from a specific region, “lying flat” might be driven more by non-demographic factors rather than individuals’ backgrounds. However, respondents with different education levels showed significant differences in work autonomy: primary-level psychiatrists with graduate education or above exhibited higher work autonomy than undergraduate psychiatrists. A possible explanation is that primary-level psychiatrists with graduate education are fewer in number and may receive more attention and trust from the organization, thus enjoying higher work autonomy.

This study found that “lying flat” was significantly positively associated with patient threats and violence, workload, role conflict, and reduced personal accomplishment, while being significantly negatively associated with perceived organizational support and work autonomy. The results of SEM indicated that perceived organizational support had a negative effect on reduced personal accomplishment and “lying flat”; work autonomy negatively affected reduced personal accomplishment; work autonomy did not have a significant direct effect on “lying flat”; and reduced personal accomplishment positively affected “lying flat”. Regression analysis revealed that reduced personal accomplishment partially mediated the relationship between perceived organizational support and “lying flat”; patient threats and violence moderated the relationship between perceived organizational support and reduced personal accomplishment by weakening this effect, workload did not significantly moderate this relationship, while role conflict showed a moderating effect by weakening this relationship; reduced personal accomplishment fully mediated the relationship between work autonomy and “lying flat”; patient threats and violence moderated the relationship between work autonomy and reduced personal accomplishment by weakening this relationship, workload also weakened this relationship, while role conflict did not show a significant moderating effect.

5.1.2 Current status of “lying flat” among primary-level psychiatrists

“Lying flat” refers to a passive state in which individuals exhibit low motivation, low

engagement, and avoidance of responsibilities at work. Existing empirical research has mostly focused on general occupational groups, while studies specifically targeting primary-level psychiatrists remain limited. This study made the first attempt to incorporate “lying flat” as the core dependent variable in empirical analysis among this population. By constructing a hypothesized model, it explored the relationships of “lying flat” with job resources (organizational support and work autonomy), burnout (reduced personal accomplishment), and job demands (patient threats and violence, workload, and role conflict), holding theoretical and practical significance.

This study used the Oldenburg Burnout Inventory (OBI) to measure the level of “lying flat” among primary-level psychiatrists (Demerouti et al., 2003). The questionnaire adopted a 6-point Likert scale, where 1 = “strongly disagree”, 2 = “disagree”, 3 = “somewhat disagree”, 4 = “somewhat agree”, 5 = “agree”, and 6 = “strongly agree”. Statistical results showed that 21.12% of thre responents scored between 1 (inclusive) and 2, 28.89% scored between 2 (inclusive) and 3, 34.05% scored between 3 (inclusive) and 4, 11.64% scored between 4 (inclusive) and 5, and 4.31% scored between 5 (inclusive) and 6. Using a score of 4 or higher (“somewhat agree” or above) as the criterion for “lying flat”, we found that 15.95% of primary-level psychiatrists exhibited “lying-flat”, including 11.64% in mild state and 4.31% in severe state. It is noteworthy that although 84.05% of respondents did not meet the “lying flat” criterion, 21.55% fell within the “grey zone” between scores of 3 (exclusive) and 4 (exclusive). These primary-level psychiatrists might already have a certain tendency toward “lying flat”. Without timely intervention, they are highly likely to develop into “lying flat”, further deteriorating the “lying flat” problem among primary-level psychiatrists. Overall, the results indicated a serious “lying flat” phenomenon among primary-level psychiatrists. Without effective countermeasures, the mental health needs of the public will not be adequately addressed, thereby threatening social security and stability and undermining the development of the healthcare sector.

5.1.3 Interaction between job resources, reduced personal accomplishment, and “lying flat” at work

The JD-R model suggests that the work environment consists of two core elements: job demands and job resources (Demerouti et al., 2001). Job demands trigger burnout through the health impairment process, while job resources reduce burnout and enhance performance through the motivational process (Demerouti et al., 2001). In this study, reduced personal accomplishment represents a core dimension of burnout, while “lying flat” at work is conceptualized as a deliberate withdrawal of work effort aimed at conserving personal resources

in response to actual or threatened resource loss in the workplace.

The findings revealed that perceived organizational support was significantly and negatively associated with “lying flat”, indicating that higher organizational support could directly reduce the tendency to “lie flat”. Perceived organizational support was also found to be significantly and negatively related to reduced personal accomplishment, while reduced personal accomplishment was significantly and positively associated with “lying flat”, suggesting that organizational support could indirectly reduce “lying flat” by lowering reduced personal accomplishment. The mediating effect of reduced personal accomplishment was significant, and it partially mediated the relationship between perceived organizational support and “lying flat”. This demonstrates that organizational support can indirectly reduce “lying flat” by alleviating reduced personal accomplishment among primary-level psychiatrists. By providing external resources (e.g., compensation, training, and administrative support), organizational support can assist physicians in coping with work stress and enhance their professional efficacy, thereby relieving reduced personal accomplishment and preventing the cognition of “I am not competent for the job”. Psychiatrists with higher levels of reduced personal accomplishment are more likely to adopt “lying flat” to escape responsibilities; when they have the perception that their work is meaningless or they are incompetent, they tend to reduce effort and “lay flat”, manifested as indifferent attitudes and avoidance of additional tasks.

This study also found that work autonomy was significantly and negatively associated with reduced personal accomplishment, while reduced personal accomplishment was significantly and positively associated with “lying flat”. This indicates that work autonomy (e.g., autonomy in scheduling and clinical decision-making) could alleviate reduced personal accomplishment among psychiatrists by enhancing their sense of control, thereby reducing “lying flat”. Moreover, the direct effect of work autonomy on “lying flat” was not significant, while the mediating effect of reduced personal accomplishment was significant. This suggesting that work autonomy could not directly reduce “lying flat” among primary-level psychiatrists; instead, it could only indirectly reduce “lying flat” by alleviating reduced personal accomplishment. Reduced personal accomplishment thus served as a full mediator. Work autonomy, as an internal resource, grants psychiatrists control over their work, making them more likely to experience accomplishment (for example, achieving treatment goals through independent decisions), thus alleviating reduced personal accomplishment. The significant mediating effect of reduced personal accomplishment between work autonomy and “lying flat” indicated that although work autonomy did not directly affect “lying flat”, it could reduce “lying flat” via the mediated path “work autonomy → reduced personal accomplishment → lying flat”.

For instance, as psychiatrists with high work autonomy experience stronger control and lower reduced personal accomplishment, they are less likely to “lie flat”; conversely, when hospitals impose excessive restrictions on psychiatrists’ clinical decision-making (low autonomy), their reduced personal accomplishment would be intensified, resulting in higher levels of “lying flat”.

5.1.4 Moderating effects of patient threats and violence, workload, and role conflict

According to the JD-R Model, challenge job demands can enhance the positive effect of job resources on work engagement (Hobfoll, 2011b). In contrast to challenge job demands, hindrance job demands obstruct personal growth and achievement and hinder goal attainment (Podsakoff et al., 2023). In Chapter 2, based on the boost effect of job demands, we proposed hypotheses that patient threats and violence, workload, and role conflict would respectively strengthen the buffering effect of organizational support and work autonomy on reduced personal accomplishment. However, empirical evidence did not support these hypotheses, inconsistent with the boost effect of job demands in the JD-R model. It may be explained by the varied boost effects of different types of job demands. That is, challenge job demands can exhibit a boost effect, whereas hindrance job demands cannot. In the specific context of primary-level psychiatrists, patient threats and violence, workload, and role conflict are likely to serve as hindrance job demands. The specific results are shown as follows.

Patient threats and violence significantly weakened the path between perceived organizational support and reduced personal accomplishment. The simple slope analysis showed that when patient threats and violence were at a high level, the negative effect of perceived organizational support was significantly weakened; when patient threats and violence were at a low level, the negative effect of perceived organizational support was significantly pronounced. This indicates that the higher the level of patient threats and violence, the weaker the negative effect of organizational support on reduced personal accomplishment, and vice versa. Similarly, the simple slope analysis revealed that when patient threats and violence were at a high level, the negative effect of work autonomy on reduced personal accomplishment was significantly weakened; when patient threats and violence were at a low level, this negative effect was significantly pronounced. This suggests that as patient threats and violence increase, the negative effect of work autonomy on reducing reduced personal accomplishment decreases; conversely, under lower levels of patient threats and violence, the negative effect of work autonomy on reduced personal is stronger.

Workload did not have a significant moderating effect in the path between perceived organizational support and reduced personal accomplishment. This indicates that workload

does not influence the relationship between perceived organizational support and reduced personal accomplishment; regardless of the level of workload, perceived organizational support could consistently alleviate reduced personal accomplishment. However, workload demonstrated a significant moderating effect in the path between work autonomy and reduced personal accomplishment by weakening this relationship. The simple slope analysis showed that when workload was at a high level, the negative effect of work autonomy on reduced personal accomplishment was significantly weakened; when workload was at a low level, this negative effect was significantly pronounced. This indicates that the higher the level of workload, the weaker the negative effect of work autonomy on reduced personal accomplishment, and vice versa.

Role conflict was found to significantly moderate the path between perceived organizational support and reduced personal accomplishment by weakening this relationship. When role conflict was at a high level, the negative effect of perceived organizational support on reduced personal accomplishment was significantly weakened; when role conflict was at a low level, this negative effect was significantly pronounced. This indicates that role conflict could weaken the protective role of perceived organizational support. Under low role conflict, perceived organizational support can effectively alleviate reduced personal accomplishment; under high role conflict, psychiatrists must cope with multiple competing demands, dispersing the supportive resources from the organization, thus limiting their capacity to enhance personal accomplishment, leading to increased risk of “lying flat”. Moreover, role conflict did not have a significant moderating effect in the path between work autonomy and reduced personal accomplishment, indicating that role conflict did not influence this relationship. While work autonomy alleviates reduced personal accomplishment through enhanced internal control, role conflict represents external contradictions, resulting in no significant interaction between the two.

In summary, the “lying flat” state of primary-level psychiatrists is jointly influenced by job resources (organizational support and work autonomy), personal resources (personal accomplishment), and job demands (patient threats and violence, workload, and role conflict). Therefore, to reduce “lying flat” among primary-level psychiatrists, it is essential to enhance organizational support and improve work autonomy while reducing patient threats and violence and controlling their workload.

5.2 Implications

Theoretically, this study deepens the understanding of the influence path of job resources in the JD-R framework by demonstrating that job resources influence behavior through the mediated pathway of “job resources → reduced personal accomplishment → lying flat”. This study empirically validated the effect job demands in weakening the buffering effect of job resources. Meanwhile, the results revealed that external social resources (organizational support) directly influence “lying flat”, whereas internal psychological resources (work autonomy) only influence “lying flat” via a mediated mechanism. In additiona, qualitative job demands have stronger resource depletion effect compared to quantitative job demands. In practice, these insights highlight the necessity of strengthening job resources, regulating job demands, improving the social environment and doctor-patient relationships, and enhancing managerial capacity. Such multi-level coordinated efforts are essential to alleviate “lying flat” among primary-level psychiatrists and stimulate greater work engagement.

5.2.1 Theoretical implications

The hypothesis testing results of this study provide multi-dimensional theoretical implications for the JD-R model and the COR theory. The findings not only confirm their core propositions but also enrich the understanding of job resources, job demands, and the dynamic interaction of resources through empirical evidence.

5.2.1.1 Deepening the pathway of job resources from direct effects to mediated mechanisms

The JD-R theory emphasizes that job resources enhance positive work outcomes through a motivational process, but does not clearly specify the mediating chain of this process (Bakker & Demerouti, 2017). This study found that perceived organizational support and work autonomy, as typical job resources, were significantly and negatively associated with reduced personal accomplishment among primary-level psychiatrists, supporting the core proposition of the JD-R model that job resources buffer the health impairment process. Meanwhile, reduced personal accomplishment was found to significantly mediate the relationship between perceived organizational support and “lying flat”, as well as between work autonomy and “lying flat”. This indicates that job resources may not only influence “lying flat” directly; it can also influence “lying flat” by mitigating individuals’ resource loss (reduced personal accomplishment). This finding refines the motivational process in the JD-R model by showing

that job resources not only exert a direct effect on “lying flat” but also indirectly influence it by protecting individuals’ psychological resources (e.g., personal accomplishment). By revealing the mediated pathway of “job resources → psychological resources → behavioral outcomes”, this study expands the nderstanding of the motivational mechanism.

5.2.1.2 Empirical support for the interaction between job demands and resources

The JD-R theory proposes that challenge job demands can accentuate the buffering effect of job resources on burnout, the so-called boost hypothesis (Bakker et al., 2023). However, the moderating effect of hindrance job demands in the relationship between job resources and burnout still requires further exploration. The results of this study revealed that patient threats and violence significantly weakened the path between perceived organizational support and reduced personal accomplishment, as well as the path between work autonomy and reduced personal accomplishment. Similarly, role conflict significantly weakened the path between perceived organizational support and reduced personal accomplishment, while workload significantly weakened the path between work autonomy and reduced personal accomplishment. However, role conflict did not moderate the path between work autonomy and reduced personal accomplishment, and workload did not moderate the path between perceived organizational support and reduced personal accomplishment. The findings therefore did not support the boost hypothesis for job demands. A possible explanation is that in the specific context of primary-level psychiatric hospitals, patient threats and violence, workload, and role conflict act as hindrance job demands rather than challenge job demands. However, future research is needed to deepen the understanding of these two types of job demands by empirically examining the differentiated effects of challenge demands and hindrance demands.

5.2.1.3 Differentiated effects of external social resources and internal psychological resources

According to the COR theory, different types of resources may have varied effects, but the theory does not explicitly distinguish between external resources and internal resources (Hobfoll, 2011b). In this study, perceived organizational support, as an external social resource, was found to be have a significant direct negative association with “lying flat”. In contrast, work autonomy, as an internal psychological resource, did not demonstrate a significant direct negative association with “lying flat”; instead, it exerted its influence only through the mediation of reduced personal accomplishment. This finding suggests that external social resources (e.g., organizational support) can buffer resource loss threats by directly supplying

emotional or instrumental resources; however, internal psychological resources (e.g., work autonomy) influence behavior only by being transformed into personal psychological resources (e.g., personal accomplishment), indicating that their effect depends on resource conversion efficiency. This difference suggests that the COR theory may benefit from further distinguishing resources based on the “direct usability”: external social resources possess “immediate buffering effect”, whereas internal psychological resources demonstrate “indirect effect through transformation”. Thus, the heterogeneity of resources influences their influence pathways and effectiveness. This insight further advances the COR theory by highlighting differential mechanisms across resource categories.

5.2.1.4 Qualitative threats have a stronger resource depletion effect than quantitative threats

The COR theory emphasizes that the impact of resource loss is more powerful than that of resource gain (Hobfoll, 1989); however, it does not explicitly address differences in the strength of this impact caused by different types of resource threats. In this study, the results related to the moderating effects of job demands showed that qualitative job demands (e.g., patient threats and violence) consistently had significant moderating effects on the relationships between job resources and reduced personal accomplishment, whereas quantitative job demands (e.g., workload) only showed significant moderation in some contexts. This indicates that qualitative job demands (e.g., patient threats and violence), as threats to interpersonal or role-related resources, are more likely to rapidly deplete existing resources compared with quantitative job demands (e.g., workload). Qualitative threats are thus more effective in weakening the buffering effects of job resources. This highlights that in the COR theory, it is necessary to distinguish different types of resource threats and pay attention to the “qualitative characteristics”, as different types of threats vary in their depletion power toward existing resources.

Overall, this study validates the core logic of JD-R theory regarding the motivational process of job resources and the interaction between job demands and resources, and supports the fundamental assumptions of the COR theory concerning resource loss accumulation and resource protection priority. Moreover, it extends both theoretical frameworks by clarifying the mediating mechanism, identifying the buffering effects of different types of resources, and revealing the differential impacts of qualitative versus quantitative job demands. However, future research remains necessary to further validate these insights.

5.2.2 Practical implications

According to the hypothesis testing results in Chapter Four, perceived organizational support and work autonomy significantly reduced burnout and “lying flat” among primary-level psychiatrists, while patient threats and violence, workload, and role conflict weakened the protective effects of perceived organizational support and work autonomy. The empirical analysis revealed that reduced personal accomplishment played a essential mediating role, partially mediating the path from work autonomy to “lying flat” and fully mediating the path from perceived organizational support to “lying flat”. This indicates that interrupting the mediation of reduced personal accomplishment is crucial for preventing “lying flat”. Interventions should focus on providing multidimensional organizational support, enhancing work autonomy among primary-level psychiatrists, and improving personal accomplishment, thereby lowering “lying flat” tendencies. Based on the findings of this study, implications are proposed at three levels: government, hospital management, and psychiatrists.

A. Government: Strengthen macro-level resource supply and optimize the institutional environment

1) Increase organizational support to enhance professional accomplishment

This study revealed that perceived organizational support was negatively associated with reduced personal accomplishment and “lying flat” among primary-level psychiatrists, and reduced personal accomplishment partially mediated this relationship. Therefore, the government should reinforce organizational support through systemic policy design, enhancing psychiatrists’ perception of the organization’s attention, thereby reinforcing the direct effect of organizational support in relieaving “lying flat” and its indirect effect on “lying flat” by mitigating reduced personal accomplishment. For example, the government can promote the standardization of primary-level psychiatric institutions, improve diagnostic and treatment facilities, and increase psychiatrists’ compensation, thereby alleviating the frustration caused by resource scarcity. The government is suggested to introduce promotion policies favoring primary-level psychiatrists by incorporating tenure as an essential criterion for professional advancement to address concerns about limited career development opportunities.

2) Provide policy support to increase work autonomy

The government can issue *Guidelines on Clinical Autonomy for Primary-level psychiatrists*, explicitly clarifying psychiatrists’ independent decision-making authority in key areas such as adjustments of individualized treatment plans and the development of community rehabilitation programs. The government is suggested to promote decentralization in hospital management

by granting primary-level hospitals autonomy in personnel decisions and workflow optimization. This will enable hospitals to enhance psychiatrists' work autonomy on the policy level, which can help mitigate reduced personal accomplishment, thereby reducing "lying flat".

3) Lower job demands to buffer the negative effects

This study revealed that job demands such as patient threats and violence and role conflict weakened the effect of perceived organizational support in improving reduced personal accomplishment, while patient threats and violence and workload weakened the effect of work autonomy in improving reduced personal accomplishment. Therefore, the government should reduce these negative factors through policy design. It is necessary to develop *Safety Guidelines for Mental Health Institutions*, mandate security staff and surveillance systems, provide trainings to psychiatrists on violence coping strategies, and take preventive measures against violence toward healthcare professionals. The government is suggested to integrate violent behaviors of psychiatric patients into community governance and establish "patient risk assessment and early warning mechanisms", reducing safety threats toward psychiatrists. The government can develop a tiered county-township-village mental health service network to distribute work top-down, thus reducing primary-level psychiatrists' workload. Limits should be set on non-clinical work hours, ensuring adequate clinical time for primary-level psychiatrists. In addition, the responsibilities of primary-level psychiatrists should be clarified to reduce role conflict caused by ambiguous duties.

B. Hospital management: Improve internal management and enhance the effectiveness of job resources

1) Strengthen organizational support and establish a "full-cycle" employee care system

The findings of this study suggest that organizational support is a key resource for mitigating reduced personal accomplishment and "lying flat". Hospitals should establish mechanisms focused on addressing psychiatrists' needs and solving practical problems. They can establish psychological counseling offices staffed with professional counselors to provide psychiatrists with regular psychological counseling services. Peer support groups can be established to help psychiatrists relieve their stress by sharing experiences. Roundtable meetings can be held regularly to collect feedback and suggestions from psychiatrists, making them feel that their voices are valued. Incentives can be provided by implementing performance-based compensation, making psychiatrists perceive that their efforts are rewarded. Awards can be offered to psychiatrists with outstanding contributions to enhance their professional accomplishment.

2) Enhance work autonomy and control over work

This study found that work autonomy was negatively related to reduced personal accomplishment, and reduced personal accomplishment fully mediated the relationship between work autonomy and “lying flat”. Thus, interrupting the mediator, namely, reduced personal accomplishment, can prevent the development of “lying flat”. Hospitals should therefore delegate more decision-making power to psychiatrists, making them feel that they can lead their work. Physician-led treatment models should be promoted to reduce administrative interference, enabling psychiatrists to develop individualized treatment plans tailred to patients. Flexible work arrangements can be implemented, allowing psychiatrists to adjust their schedule based on patient needs, which will contribute to their work-life balance. This study revealed that work autonomy was higher among psychiatrists with graduate education or above. Therefore, hospitals should support capacity building among psychiatrists with lower educational attainment. For example, training can be provided to improve their professional skills and enhance their confidence in autonomous decision-making.

3) Reduce job demands and optimize workflows

This study found that job demands such as patient threats and violence, role conflict, and workload weakened the protective effects of perceived organizational support and work autonomy. Therefore, efforts should be made to mitigate these negative factors through institutional design and workflow optimization. Hospitals should deploy anti-violence tools and adequate security personnel and provide violence-prevention training to reduce patient threats and violence. The responsibilities and duties of primary-level psychiatrists should be clearly defined to avoid responsibility ambiguity and overlapping duties, ensuring that organizational support can be effectively transformed into work engagement. Reasonable task allocation and shift planning are also essential. Attention should be paid to psychiatrists’ work intensity, preventing work overload.

C. Psychiatrists: Enhance personal resources and proactively cope with challenges at work

1) Enhance self-efficacy to alleviate reduced personal accomplishment

This study showed that reduced personal accomplishment was a direct antecedent of “lying flat” and mediated the relationshipss of perceived organizational support and work autonomy with “lying flat”. Psychiatrists should improve their self-efficacy through continuous learning and practice, actively participate in training on new knowledge in mental health, and master advanced diagnostic and treatment techniques, thereby enhancing their sense of control over work. They should proactively seek feedback and recognition by consulting colleagues and senior physicians for guidance and performance-related feedback, and follow up on patient

progress, using these as sources of professional accomplishment to reduce the perception of meaninglessness of work.

2) Actively pursue work autonomy to enhance work engagement

The results of this study indicated that work autonomy could mitigate reduced personal accomplishment and indirectly decrease “lying flat” through the mediation of reduced personal accomplishment. Psychiatrists should therefore strive for more autonomy in clinical practice by putting forward their suggestions on diagnosis and treatment, and communicating with senior physicians to gain support. They should refine work methods and adjust workflows according to their work habits, thereby improving efficiency and enhancing their sense of control over work.

3) Develop coping strategies to buffer the influence of job demands

The findings suggest that job demands such as patient threats and violence, workload, and role conflict exacerbate reduced personal accomplishment. Therefore, psychiatrists should develop appropriate coping strategies to mitigate these negative effects. For example, they can practice emotion-regulation techniques such as mindfulness meditation and controlled breathing, enabling them to adjust their emotions promptly when encountering patient aggression or frustration at work, thereby preventing such setbacks from triggering reduced personal accomplishment.

5.3 Contributions and innovations

By integrating multidisciplinary theories, focusing on primary-level psychiatrists, and uncovering differentiated mediation and moderation mechanisms, this study achieves innovative breakthroughs in terms of theoretical framework, variable relationships, and research subjects. It constructed an integrated model of “resource – depletion – adaptation”, clarified the conceptual boundary between “lying flat” at work and reduced personal accomplishment, and validated differentiated mediating and moderating effects. It provides a new paradigm for research on occupational mental health mechanisms and offers reference and recommendations for intervention measures to prevent and reduce “lying flat” among primary-level psychiatrists, contributing to improving healthcare service quality.

5.3.1 Contributions

Based on the JD-R model and the COR theory, this study empirically examined the relationships of job resources (e.g., organizational support and work autonomy) with reduced personal

accomplishment and “lying flat” among primary-level psychiatrists, as well as the boundary conditions. Its main contributions are as follows.

1) Validating and extending the core role of job resources in the JD-R model

The JD-R model emphasizes that job resources (e.g., organizational support and work autonomy) can buffer the negative effects of job demands and promote positive outcomes (Bakker et al., 2023). The findings of this study showed that both external resources (organizational support) and internal resources (work autonomy) directly mitigated reduced personal accomplishment among primary-level psychiatrists, supporting the proposition of the JD-R model that resources foster resource gains, which means, resource acquisition can directly offset resource loss (reduced personal accomplishment is essentially a loss of self-efficacy, a type of resources). The mediating effect of reduced personal accomplishment suggests that job resources do not merely directly reduce “lying flat” at work, but can also indirectly reduce “lying flat” by mitigating burnout. While previous JD-R research has mainly focused on the direct motivational effect of resources on engagement, this study established reduced personal accomplishment as a key mediator between resources and “lying flat”, validating the bridging role of burnout in resource protection and “lying flat” prevention.

2) Revealing the weakening moderating effect of job demands and expanding the boundary conditions of resource-demand interaction in the JD-R model

The classic JD-R perspective posits that job resources can buffer the negative impact of job demands (Bakker et al., 2023). However, this study revealed a significant moderating effect of job demands: high job demands weakened the positive effects of job resources. As job demands (patient threats and violence, role conflict) increased, the effect of organizational support in mitigating reduced personal accomplishment decreased. This indicates a “demand threshold” for the protective effect of external resources: when demands exceed resource replenishment capacity, the buffering effect of resources collapses. This finding supports the view of the COR theory that resources cannot offset the net loss caused by excessive demands (Hobfoll, 2011b).

3) We conceptualize the theoretical construct of “lying flat at work” by positioning it within the COR theory, providing a rigorous theoretical basis for explaining why and how employees adopt this withdrawal-oriented coping response (Yin et al., 2023). We argue that “lying flat at work” reflects a deliberate reduction of effort aimed at conserving resources under conditions of overwhelming resource loss. Our empirical findings support this interpretation, moving the literature beyond descriptive accounts toward a theoretically anchored explanation of the phenomenon (Zhang et al., 2025).

In addition, this study revealed differentiated pathways through which organizational

support and work autonomy influence “lying flat”. The results showed that perceived organizational support not only indirectly reduced “lying flat” through reduced personal accomplishment, but also directly decreased “lying flat”. In contrast, work autonomy influenced “lying flat” solely through the mediation of reduced personal accomplishment. This suggests that primary-level psychiatrists’ work autonomy must be translated into a sense of efficacy to reduce “lying flat” and cannot directly drive positive work behavior. This study established reduced personal accomplishment as a “bridge” between resources and behavior, offering a new perspective for research on the mediation mechanism of burnout.

4) Advancing the theoretical association between burnout (reduced personal accomplishment) and “lying flat

This study found a significant positive association between reduced personal accomplishment and “lying flat”, confirming that reduced personal accomplishment represents a loss of occupational efficacy (job resource), whereas “lying flat” reflects a “withdrawal” response when resource loss reaches a threshold. This supports an integrated JD-R and COR framework in which resource-demand imbalance leads to burnout, which drives the shift in resource-protection strategies from “active acquisition” to “passive withdrawal”, ultimately manifesting as “lying flat” (Rastogi et al., 2018). This offers a resource-loss-based theoretical explanation for “lying flat” among primary-level psychiatrists.

5) Enriching contextual specificity in the job demands-resources relationship

By introducing patient threats and violence, workload, and role conflict as moderators, this study systematically examined how different job demands affect the relationship between resources and reduced personal accomplishment, revealing differentiated contextual effects and offering new evidence for the boundary conditions in COR research. The results showed that regardless of the resource type (external resources such as organizational support vs. internal resources such as work autonomy), patient threats and violence consistently weakened the buffering effect of resources on reduced personal accomplishment: when patient threats and violence were at a high level, the effect of perceived organizational support and work autonomy in mitigating reduced personal accomplishment was hindered. The incorporation of patient threats and violence (a hospital-specific job demand) into the theoretical model highlights the context specificity of this study. The findings revealed that role conflict only weakened the effect of perceived organizational support, while workload only weakened the effect of work autonomy. This may be because the effectiveness of organizational support requires clearly defined job responsibilities, whereas psychiatrists with high work autonomy can cope with role conflict through autonomous work arrangements and task adjustment. Another reason is the

typical high workload among primary-level psychiatrists. Organizational support, as an external resource, can buffer workload through institutional guarantees (e.g., staffing adjustments), while work autonomy requires relatively lower workload conditions to remain effective.

5.3.2 Innovations

In recent years, the concept of “lying flat”, which describes individuals voluntarily withdrawing effort and lowering career aspirations under high pressure, has gradually shifted from a term in youth subculture to an academic research topic. However, research on “lying flat” among professional groups, especially within the healthcare sector, is still in an early stage. Meanwhile, burnout among primary-level psychiatrists, a population characterized by the dual attributes of “primary healthcare” and “mental health services”, has received increasing attention. However, current research has not yet systematically examined the formation mechanism of “lying flat”, a negative occupational state distinct from burnout that emphasizes voluntary withdrawal rather than passive exhaustion. By constructing a structural equation model of “perceived organizational support and work autonomy → reduced personal accomplishment → lying flat” and introducing patient threats and violence, workload, and role conflict as moderators in the model, this study empirically tested 14 hypotheses. It exhibits innovation in theoretical integration, mechanism identification, research population, and practical implications, providing new reference for human resource management in primary healthcare and occupational mental health research.

1) Integrating multiple theories and breaking the fragmented view between “resources” and “depletion”

Traditional occupational mental health research often relies on single theories. For example, social support theory emphasizes the buffering effect of organizational support (Kahn, 1990), the self-determination theory (SDT) highlights how work autonomy fulfills basic psychological needs (Deci & Ryan, 2000), and the COR theory focuses on the balance between resource loss and gain (Hobfoll, 1989). However, these theories explain the influence of “resource supply” or “resource depletion” in isolation, rarely accounting for the interaction between job resources and job demands in influencing work state, and failing to connect reduced personal accomplishment (an essential dimension of burnout) with “lying flat” (an emerging negative occupational state) (Maslach, 1982). This study innovatively integrated the JD-R model and the COR theory to develop a framework with “dual paths” and “dual mechanism”. On one hand, we conceptualized perceived organizational support and work autonomy as key resource inputs and examined their indirect effects on “lying flat” by mitigating reduced personal

accomplishment. On the other hand, we incorporated patient threats and violence, workload, and role conflict as moderators to test how they weaken the buffering effects of resource inputs on job demands. This integrated approach overcame the limitation of a singular theoretical perspective. By introducing mediators and moderators, it revealed a dynamic process of “resource input → psychological depletion → behavioral adaptation” that better reflects the real working conditions of primary-level psychiatrists, who need adequate organizational support and work autonomy while having to cope with occupation-specific job demands such as patient threats and violence and role conflict. These factors interactively shape the work state of primary-level psychiatrists.

2) Operational refinement on concepts by distinguishing “lying flat” at work from burnout

The concept of “lying flat”, since its emergence in 2021, has lacked a unified academic definition. Some scholars have mistakenly treated it as equivalent to behavioral manifestations of burnout, neglecting its distinctive characteristics: “lying flat” at work emphasizes voluntary withdrawal from goal pursuit, whereas burnout reflects passive exhaustion. The innovation of this study lies in distinguishing between the two concepts through empirical evidence. Burnout is characterized as passive exhaustion, whereas “lying flat” manifests as an active reduction in work engagement, refusal of career advancement, and avoidance of responsibility. The hypothesis testing results provided empirical evidence for this distinction. Our results showed that reduced personal accomplishment was positively associated with “lying flat”, suggesting that reduced personal accomplishment is an antecedent of “lying flat”, rather than a dimension of the same concept along with “lying flat”. Moreover, if “lying flat” and burnout were conceptually equivalent, mediation would not be statistically significant. However, the results of this study further found that work autonomy affected “lying flat” only through the full mediation of reduced personal accomplishment, whereas perceived organizational support affected “lying flat” both directly and indirectly via reduced personal accomplishment. This supported the hypothesis that reduced personal accomplishment mediates the relationship between resources and “lying flat” and clarifyied conceptual boundaries between “lying flat” and burnout, providing an operational paradigm for future research.

3) Variable relationship refinement by revealing dual-path mediation of reduced personal accomplishment

This study identified reduced personal accomplishment as the core mediator between job resources and “lying flat” across two paths: a) perceived organizational support → reduced personal accomplishment → lying flat, and b) work autonomy → reduced personal accomplishment → “lying flat”. Thus, it revealed the mediated paths influencing “lying flat”

among primary-level psychiatrists. The results showed that perceived organizational support, as an external resource (by providing emotional and instrumental support), not only directly reduced “lying flat” but also indirectly hindered “lying flat” by enhancing psychiatrists’ perceived professional value (i.e., mitigating reduced personal accomplishment). In contrast, work autonomy, as an internal resource, influenced “lying flat” only through the mediation of reduced personal accomplishment. This difference holds significant theoretical implications: the dual paths of perceived organizational support suggest that primary-level psychiatrists’ needs for external support are both immediate and fundamental; the single path of work autonomy implies that the core value of granting psychiatrists autonomy lies in restoring their impaired professional accomplishment, rather than directly altering their behavioral tendencies.

4) Demonstrating differentiated boundary conditions for moderators

By comparing the effects of different moderators across different resource pathways, this study suggested that the significance of moderation depends on the fit between resource types and demand characteristics. The results showed that patient threats and violence weakened the buffering effects of both external resources (organizational support) and internal resources (work autonomy) on reduced personal accomplishment. By introducing patient threats and violence (a healthcare-specific job demand) as a moderator in the model, this study found that when psychiatrists frequently faced patient aggression or threats, their perceived professional value diminished significantly (higher reduced personal accomplishment), even if organizational support was available or autonomy was granted. This indicated the “disruptive intervention effect” of patient threats and violence on occupational mental health and clarified its “erosive effect” on resource buffering, thereby enriching the boundary conditions of “occupation-specific job demands” in the JD-R model. The findings further showed that workload weakened the resource effect only in the work autonomy path. A possible explanation is that external resources such as organizational support can directly mitigate workload through measures such as increasing staffing or optimizing scheduling (e.g., colleague support in case of overload), making its relationship with reduced personal accomplishment insensitive to workload levels. In contrast, work autonomy reflects an individual’s sense of control; under excessive workload, psychiatrists are unable to effectively utilize their autonomy even if it is granted (e.g., having autonomy in designing treatment plans but no time to implement them), making autonomy ineffective in buffering reduced personal accomplishment. Moreover, the results demonstrated that role conflict weakened resource effects only in the perceived organizational support pathway. This suggests that addressing reduced personal accomplishment requires external support such as well-defined job responsibilities and role-

related training. In contrast, work autonomy, as a form of internal control, cannot directly alleviate externally imposed role conflicts (e.g., having autonomy in deciding how to work but being unable to refuse additional roles), and thus its moderating effect is not significant. In summary, these findings reflect a fundamental logic distinction: external resources depend on contextual fit, whereas internal resources depend on the individual’s sense of control.

5) Focusing on primary-level psychiatrists to fill the gap in “lying flat” research

Current “lying flat” research has mainly targeted general employees or broad healthcare professionals, rarely focusing on psychiatrists. In addition, previous research typically focused on overt outcomes (e.g., turnover), while “lying flat”, a covert work outcome characterized by withdrawal, has received little attention. “Lying flat”, a covert resistance with no turnover but low engagement, is less visible yet often more harmful than turnover. Taking primary-level psychiatrists as the research population, this study systematically examined the determinants and mechanisms of “lying flat”, enriching research on the mental health and work engagement of a highly specific occupational group (psychiatrists), holding population-specificity and practical significance. The focus on primary-level professionals, a group highly prone to occupational exhaustion, makes the findings closely aligned with public health needs. The “lying flat” phenomenon among primary-level psychiatrists not only affects individual well-being but also leads directly to undermined primary-level mental health services. The inclusion of patient threats and violence as a moderator is grounded in the realities faced by primary-level psychiatrists, who often work under poor security conditions and confront high risks of patient aggression. This ensures a strong alignment between the variables in this study and the characteristics of the target population.

5.4 Limitations and future prospects

This study provides preliminary evidence for understanding the work disengagement mechanism among primary-level psychiatrists. However, limitations remain in terms of the range of dimensions of resources and demands, the complexity of mechanisms, and research design. Future research should adopt a dynamic perspective grounded in JD-R and COR theories to further explore the complete formation process of “lying flat” by considering multi-dimensional resources, refining the classifications of job demands, and employing a longitudinal research design. Such efforts will contribute to mitigating burnout and reducing “lying flat” by providing more precise theoretical guidance.

5.4.1 Limitations

This study, grounded in the JD-R model and the COR theory, explored the mechanisms through which job resources such as organizational support and work autonomy influence reduced personal accomplishment and “lying flat” among primary-level psychiatrists, and examined the moderating effects of patient threats and violence, workload, and role conflict therein. Although several hypotheses were supported, this study still presents limitations in terms of theoretical logic and empirical evidence.

1) The dimensions of resources and demands covered in the theoretical framework are not comprehensive, and the interaction and dynamic nature of resources were not fully considered. The JD-R theory emphasizes the dynamic interaction between job resources (e.g., organizational support and work autonomy) and job demands (e.g., role conflict and workload) (Bakker & Demerouti, 2024; Bakker et al., 2023), while the COR theory highlights the multidimensional nature of resources (personal, organizational, and social resources) and the dynamic process of resource loss and gain (Hobfoll, 2002, 2011a, 2011b). The limitation of this study lies in the narrow range of resource dimensions examined. It only focuses on organizational support and work autonomy, without considering personal resources (e.g., psychological capital) or social resources (e.g., colleague support, work-family balance). According to the COR theory, personal and organizational resources may form a “resource gain spiral”, where personal resources enhance the perception and utilization of organizational resources, thus more effectively buffering the negative effects of job demands (Xanthopoulou et al., 2009a).

2) The study did not distinguish different types of job demands, nor did it incorporate personal resources into the research model. The JD-R theory categorizes job demands into challenge demands and hindrance demands: challenge demands may promote growth under adequate resources, while hindrance demands directly deplete resources (Bakker & Demerouti, 2024). In this study, results of the moderating effects of patient threats and violence, workload, and role conflict did not support the hypotheses, potentially due to the absence of such differentiation: these factors may belong to hindrance demands rather than challenge demands. In addition, the non-significant direct association between work autonomy and “lying flat” may be due to the omission of personal resources (e.g., professional identification) as moderators. For example, if primary-level psychiatrists have low levels of personal resources (e.g., low professional identification), even high work autonomy may not translate into work engagement due to the lack of intrinsic motivation, ultimately resulting in “lying flat”.

3) The complexity of mediation and moderation mechanisms was not fully uncovered, and potential boundary conditions and curvilinear relationships were overlooked. This study only considered the mediation of reduced personal accomplishment. However, the COR theory suggests that resource loss may influence outcomes through sequential mediation processes (Hobfoll, 2001), e.g., insufficient organizational support → resource depletion → emotional exhaustion → lying flat. In this study, factors such as emotional exhaustion and depersonalization were not included as mediators, which might have underestimated the cumulative effect of resource loss. Recent JD-R studies showed that the interaction between resources and demands might exhibit inverted-U patterns (Bakker & Albrecht, 2018). For instance, under moderate workload, the buffering effect of organizational support may be strongest; under excessive or insufficient workload, this effect is weakened. This study assumed linear moderation effects, potentially masking such non-linear relationships. Moreover, this study did not examine moderated mediation mechanisms. Interactions between resources and demands may not only moderate the “resources → mediator” path but also the “mediator → outcome” path. For example, patient threats and violence may moderate both the effect of organizational support on reduced personal accomplishment and the effect of reduced personal accomplishment on “lying flat”. This study did not examine such complex mechanisms, limiting the understanding of the full “job resources – job demands – outcome” chain.

4) The cross-sectional design prevents causal inference. The COR theory emphasizes the dynamic process of resource preservation (Buchwald & Hobfoll, 2004), yet this study used cross-sectional data and therefore could not establish the causal direction of “insufficient organizational support → reduced personal accomplishment → lying flat”. Prolonged “lying flat” may also reduce psychiatrists’ perceived organizational support. Moreover, cross-sectional data cannot capture the processes of resource accumulation or depletion over time. Work autonomy may indirectly influence “lying flat” through career growth in a long term, while the short-term effect may not be significant.

5.4.2 Future prospects

In view of the above limitations, and considering the development trends in the JD-R and COR theories, future research can advance along the following directions:

1) Expand the theoretical framework by incorporating multidimensional resources and demands and exploring dynamic interaction mechanisms

Future studies may introduce personal resources such as psychological capital (e.g., self-efficacy and resilience) and professional identification to examine the synergistic effects of

“organizational resources (e.g., organizational support) × personal resources (e.g., resilience)”. For example, psychiatrists with high resilience may be more capable of transforming work autonomy into professional growth, thus hindering reduced personal accomplishment. In addition, future research can differentiate challenge demands and hindrance demands. Following current JD-R theory developments, future research may divide workload into “learning-related workload” (e.g., opportunities for growth brought by complex cases) and “strain-related workload” (e.g., repetitive administrative tasks), and role conflict into “role ambiguity” and “role overload”, to explore the interactions between different types of demands and resources.

2) Deepen the exploration of mechanisms by examining complex mediation mechanisms and nonlinear moderation effects

Future studies may construct sequential mediation models based on the “resource loss spiral” of the COR theory to test the cumulative effect of resource depletion through the sequential mediation pathway of “resources → initial resource loss → secondary resource loss → disengagement”. Nonlinear moderating effects and moderated mediation mechanisms can be tested using polynomial regression or response surface analysis to examine inverted-U interactions between resources and demands. In addition, future studies may further explore moderated mediation mechanisms to enrich the understanding of the complete “resources – demands – outcomes” chain.

3) Improve research design to verify causal relationships

Longitudinal tracking designs can be employed, following participants for one to three years to observe the dynamic evolution of job resources (e.g., how resource enhancement following policy interventions influences reduced personal accomplishment and “lying flat” over time) and to verify causal relationships (e.g., whether resource gain precedes a reduction in “lying flat”). Future research may also employ objective indicators and adopt mixed methods. For example, objective data (e.g., incidence rate of adverse events in the hospital) can be combined to verify the outcome of “lying flat”; interviews can be conducted to gain insights into primary-level psychiatrists’ subjective perceptions of job resources and demands, providing qualitative explanations for quantitative findings.

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Annex A: Additional Tables

Table A.1 Descriptive statistics of "lying flat"

Score	Frequency	Percentage (%)	Cumulative %
1.0	21	9.05	9.05
1.25	6	2.59	11.64
1.5	11	4.74	16.38
1.75	11	4.74	21.12
2.0	37	15.95	37.07
2.25	16	6.90	43.97
2.5	9	3.88	47.84
2.75	5	2.16	50.00
3.0	29	12.50	62.50
3.25	20	8.62	71.12
3.5	19	8.19	79.31
3.75	11	4.74	84.05
4.0	15	6.47	90.52
4.25	7	3.02	93.53
4.5	3	1.29	94.83
4.75	2	0.86	95.69
5.0	5	2.16	97.84
5.25	1	0.43	98.28
5.5	1	0.43	98.71
5.75	2	0.86	99.57
6.0	1	0.43	100.00
	232	100.0	100.0

Table A.2 Post-hoc multiple comparisons of education level and work autonomy

	Post-hoc Multiple Comparison Results							
	Group (I)	Group (J)	Mean of (I)	Mean of (J)	Difference (I–J)	*SE*	*p*	Cohen's *d*
WA	1.0	2.0	4.446	4.185	0.261	.165	.114	0.285
	1.0	3.0	4.446	5.188	-0.742	.482	.126	-0.809
	2.0	3.0	4.185	5.188	-1.003	.463	.031*	-1.095

Note: WA = work autonomy; * $p<.05$ ** $p<.01$

Table A.3 Bartlett's test of sphericity

Factor	KMO	Bartlett's Test of Sphericity		
		Approx. Chi-Square	df	Sig.
LF	.842	631.350	6	.000
PA	.897	1105.340	21	.000
POS	.943	2462.557	36	.000
WA	.851	987.101	15	.000
TAV	.695	292.521	3	.000
WL	.728	370.794	3	.000
RC	.879	1182.957	10	.000

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload.

Table A.4 Variance explained

Factor code	Eigenvalue	Eigenvalue Variance explained %	Eigenvalue Cumulative %	Variance explained (Unrotated) Eigenvalue	Variance explained (Unrotated) Variance explained %	Variance explained (Unrotated) Cumulative %	Variance explained (Rotated) Eigenvalue	Variance explained (Rotated) Variance explained %	Variance explained (Rotated) Cumulative %
LF2	3.165	79.130	79.130	3.165	79.130	79.130	3.165	79.130	79.130
LF3	0.363	9.067	88.198	-	-	-	-	-	-
LF5	0.259	6.478	94.675	-	-	-	-	-	-
LF6	0.213	5.325	100.000	-	-	-	-	-	-
PA2	4.778	68.259	68.259	4.778	68.259	68.259	4.778	68.259	68.259
PA3	0.562	8.024	76.283	-	-	-	-	-	-
PA4	0.500	7.143	83.427	-	-	-	-	-	-
PA5	0.450	6.431	89.858	-	-	-	-	-	-
PA6	0.274	3.912	93.771	-	-	-	-	-	-
PA7	0.235	3.361	97.131	-	-	-	-	-	-
PA8	0.201	2.869	100.000	-	-	-	-	-	-
POS1	7.177	79.746	79.746	7.177	79.746	79.746	7.177	79.746	79.746
POS2	0.451	5.015	84.761	-	-	-	-	-	-
POS3	0.383	4.251	89.011	-	-	-	-	-	-
POS4	0.230	2.556	91.567	-	-	-	-	-	-
POS5	0.201	2.229	93.796	-	-	-	-	-	-
POS6	0.172	1.911	95.706	-	-	-	-	-	-
POS7	0.167	1.851	97.557	-	-	-	-	-	-
POS8	0.121	1.344	98.901	-	-	-	-	-	-
POS9	0.099	1.099	100.000	-	-	-	-	-	-
WA1	4.219	70.319	70.319	4.219	70.319	70.319	4.219	70.319	70.319
WA2	0.638	10.641	80.961	-	-	-	-	-	-
WA3	0.469	7.824	88.785	-	-	-	-	-	-
WA4	0.290	4.841	93.626	-	-	-	-	-	-
WA5	0.215	3.590	97.216	-	-	-	-	-	-
WA6	0.167	2.784	100.000	-	-	-	-	-	-
TAV1	2.263	75.448	75.448	2.263	75.448	75.448	2.263	75.448	75.448
TAV2	0.479	15.981	91.429	-	-	-	-	-	-
TAV3	0.257	8.571	100.000	-	-	-	-	-	-
WL1	2.410	80.348	80.348	2.410	80.348	80.348	2.410	80.348	80.348
WL2	0.363	12.094	92.442	-	-	-	-	-	-

Factor code	Eigenvalue	Eigenvalue Variance explained %	Cumulative %	Variance explained (Unrotated) Eigenvalue	Variance explained %	Cumulative %	Variance explained (Rotated) Eigenvalue	Variance explained %	Cumulative %
WL3	0.227	7.558	100.000	-	-	-	-	-	-
RC1	4.078	81.567	81.567	4.078	81.567	81.567	4.078	81.567	81.567
RC3	0.430	8.604	90.171	-	-	-	-	-	-
RC4	0.235	4.706	94.877	-	-	-	-	-	-
RC5	0.180	3.606	98.484	-	-	-	-	-	-
RC6	0.076	1.516	100.000	-	-	-	-	-	-

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload.

Table A.5 Factor loadings

Factor (latent variable)	Item (observed variable)	Unstandardized loading (Coef.)	*SE*	*z* (CR)	*p*	Standardized loading (std. estimate)	SMC
LF	LF2	1.000	-	-	-	.825	.681
LF	LF3	1.112	.069	16.014	.000	.871	.759
LF	LF5	1.107	.068	16.299	.000	.882	.777
LF	LF6	1.078	.073	14.748	.000	.824	.678
PA	PA2	1.000	-	-	-	.827	.683
PA	PA4	1.072	.069	15.533	.000	.852	.727
PA	PA5	0.736	.057	12.916	.000	.750	.562
PA	PA7	0.921	.064	14.490	.000	.813	.661
PA	PA8	0.781	.063	12.419	.000	.729	.531
POS	POS2	1.000	-	-	-	.831	.691
POS	POS3	1.031	.058	17.658	.000	.888	.789
POS	POS4	1.079	.056	19.149	.000	.929	.862
POS	POS5	1.013	.054	18.630	.000	.915	.837
POS	POS6	0.956	.053	18.004	.000	.898	.806
POS	POS7	1.025	.056	18.424	.000	.909	.827
POS	POS8	0.942	.060	15.702	.000	.828	.685
WA	WA1	1.000	-	-	-	.783	.613
WA	WA3	1.051	.077	13.603	.000	.828	.685
WA	WA4	1.136	.077	14.677	.000	.883	.780
WA	WA6	0.961	.075	12.767	.000	.786	.618
TAV	TAV1	1.000	-	-	-	.879	.773
TAV	TAV2	1.021	.074	13.755	.000	.826	.683
TAV	TAV3	0.690	.061	11.317	.000	.693	.481
WL	WL1	1.000	-	-	-	.838	.703
WL	WL2	1.154	.074	15.586	.000	.883	.779
WL	WL3	0.956	.068	14.051	.000	.806	.650
RC	RC1	1.000	-	-	-	.733	.537
RC	RC3	1.038	.077	13.406	.000	.850	.723
RC	RC4	1.168	.078	14.951	.000	.938	.879
RC	RC5	1.142	.074	15.455	.000	.968	.937
RC	RC6	1.077	.076	14.102	.000	.890	.792

Note: LF = lying flat; PA = reduced personal accomplishment; POS = perceived organizational support; RC = role conflict; TAV = patient threats and violence; WA = work autonomy; WL = workload. "–" indicates that this serves as the reference

Annex B: Questionnaire Survey

Dear colleagues,

Hello! Thank you very much for participating in this survey. This questionnaire is designed to investigate the working environment and work conditions of primary-level psychiatrists. It is of significant value for improving the quality of psychiatrists' work. The survey is solely for the purpose of academic research, and the resuts will be reported anonymously. All information you provide will be kept strictly confidential. Thank you again for your support.

I. The following are statements related to job demands. Please choose (with a "√") the option that best reflects your actual situation.

No.	1 = "strongly disagree", 2 = "disagree", 3 = "somewhat disagree", 4 = "somewhat agree", 5 = "agree", and 6 = "strongly agree"						
1	I have experienced threats from patients.	1	2	3	4	5	6
2	I have been exposed to violence from patients.	1	2	3	4	5	6
3	I am caring for aggressive and threatening patients.	1	2	3	4	5	6
4	My job requires working fast.	1	2	3	4	5	6
5	My job requires working hard.	1	2	3	4	5	6
6	I have a great deal of work to be done	1	2	3	4	5	6
7	In my job, I often feel like different people are "pulling me in different directions".	1	2	3	4	5	6
8	I have to deal with competing demands at work.	1	2	3	4	5	6
9	My superiors often tell me to do two different things that can't both be done.	1	2	3	4	5	6
10	The tasks I am assigned at work often come into conflict with each other.	1	2	3	4	5	6
11	The things I am told to do at work often conflict with each other.	1	2	3	4	5	6
12	In my job, I am often placed in a situation where one job duty conflicts with other job duties.	1	2	3	4	5	6

II. The following are statements related to the current working conditions in your hospital. Please choose (with a "√") the option that best reflects your actual situation.

No.	1 = "strongly disagree", 2 = "disagree", 3 = "somewhat disagree", 4 = "somewhat agree", 5 = "agree", and 6 = "strongly agree"						
1	The hospital values my contribution to its well-being.	1	2	3	4	5	6
2	The hospital strongly considers my goals and values.	1	2	3	4	5	6
3	Help is available from the hospital when I have a problem.	1	2	3	4	5	6
4	The hospital really cares about my well-being.	1	2	3	4	5	6
5	The hospital is willing to help me when I need a special favor.	1	2	3	4	5	6
6	The hospital cares about my general satisfaction at work.	1	2	3	4	5	6
7	The hospital cares about my opinions.	1	2	3	4	5	6
8	The hospital takes pride in my accomplishments at work.	1	2	3	4	5	6

No.	1 = "strongly disagree", 2 = "disagree", 3 = "somewhat disagree", 4 = "somewhat agree", 5 = "agree", and 6 = "strongly agree"						
9	The hospital tries to make my job as interesting as possible.	1	2	3	4	5	6
10	I am allowed to decide how to go about getting my job done.	1	2	3	4	5	6
11	I am able to choose the way to go about my job.	1	2	3	4	5	6
12	I am free to choose the method(s) to use in carrying out my work.	1	2	3	4	5	6
13	I have control over the scheduling of my work.	1	2	3	4	5	6
14	I have some control over the sequencing of my work activities.	1	2	3	4	5	6
15	My job is such that I can decide when to do particular work activities.	1	2	3	4	5	6

III. The following are statements related to your work state. Please choose (with a "√") the option that best reflects your actual situation or feelings.

No.	1 = "strongly disagree", 2 = "disagree", 3 = "somewhat disagree", 4 = "somewhat agree", 5 = "agree", and 6 = "strongly agree"						
1	Through my work, I feel that I have a positive influence on people.	1	2	3	4	5	6
2	I accomplish many worthwhile things in this job.	1	2	3	4	5	6
3	I look after my patients' problems very effectively.	1	2	3	4	5	6
4	I feel full of energy.	1	2	3	4	5	6
5	I am easily able to understand what my patients feel.	1	2	3	4	5	6
6	I feel refreshed when I have been close to my patients at work.	1	2	3	4	5	6
7	I am easily able to create a relaxed atmosphere with my patients.	1	2	3	4	5	6
8	In my work, I handle emotional problems very calmly.	1	2	3	4	5	6
9	I always find new and interesting aspects in my work.	1	2	3	4	5	6
10	It happens more and more often that I talk about my work in a negative way.	1	2	3	4	5	6
11	Lately, I tend to think less at work and do my job almost mechanically.	1	2	3	4	5	6
12	I find my work to be a positive challenge.	1	2	3	4	5	6
13	Over time, I can become disconnected from this type of work.	1	2	3	4	5	6
14	Sometimes I feel sickened by my work tasks.	1	2	3	4	5	6
15	This is the only type of work that I can imagine myself doing.	1	2	3	4	5	6
16	I feel more and more engaged in my work.	1	2	3	4	5	6

IV. Personal Information

1) Your age: ___ years (please enter a number)

2) Gender: A. Male B. Female

3) Marital status: A. Married B. Single C. Other (e.g., divorced)

4) Professional title: A. Junior or below B. Intermediate C. Associate senior D. Senior

5) Education level: A. Junior college or below B. Undergraduate C. Graduate or above

6) Your department: A. General psychiatry B. Psychiatric rehabilitation C. Psychology D. Other psychiatric departments

7) Your tenure at the current hospital: ___ years

8) Number of beds in your hospital: ___

9) Name of your hospital: _____