LEARNING AGILITY AND GEO-OCCUPATION WELL-BEING IN GIG WORKERS: SPATIAL ADAPTATION IN THE PLATFORM ECONOMY

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Abstract

The development of the platform economy has significantly changed the work landscape, particularly for location-based gig workers who face continuous and uncertain spatial changes. This study aims to explore the conceptual relationship between learning agility and geo-occupational well-being in the context of gig workers in organizational development and change. Using a brief literature review method, this study examines previous studies on gig workers, algorithm management, occupational well-being, and learning agility. The results of the review indicate that platform-based organizational change has a strong spatial dimension and directly impacts the affective, cognitive, social, and psychosomatic well-being of gig workers. Learning agility emerges as a crucial adaptive capability that enables workers to learn from cross-location experiences, develop flexible spatial work strategies, and maintain well-being amidst geographic uncertainty. It is found that the integration of learning agility and GOWS provides a relevant framework for understanding individual adaptation in the platform economy, while offering implications for organizational development, platform policy design, and future research agendas.

Keywords: Learning agility, platform economy, geo-occupational well-being system, gig workers, occupational well-being.

1. INTRODUCTION

The platform economy, or digital platform economy, is a digitally supported business, political, and social interaction activity (Baltimore et al., 2016). Within the platform economy ecosystem, the gig economy exists as a flexible work model that utilizes platforms to connect gig workers with short-term projects or freelance assignments (Oranburg & Palagashvili, 2018). In this context, gig workers or freelancers have become the most visible symbol of this change. In Indonesia, gig workers are often depicted as the phenomenon of online motorcycle taxis from companies Gojek and Grab, which have created a new work ecosystem for two million workers, offering flexibility but also presenting complex welfare challenges (Theonia & Prabhughate, 2024). Blázquez et al. (2024) stated that this gig economy has changed how individuals access job opportunities and how organizations and work systems design labor relations amid rapidly changing socio-economic dynamics. Unlike traditional workers who have a fixed workplace, gig workers experience a unique spatial reality: they work in multiple locations in one day, do not have an office as a home base, and geographic mobility is a value of their work.

The platform economy shifts organizational management to closed, data-driven, algorithmic control, ignoring the role of workers (Asrori et al., 2025; Liu & Yin,

2024). Digital platforms like Gojek and Grab operate as "invisible organizations" that constantly change their algorithms, operating zones, and incentive structures without involving workers in the decision-making process (Ray, 2024; Tan & Gong, 2014). These changes create highly dynamic and uncertain working conditions, where adaptability is crucial for survival. Flexibility and self-learning opportunities, coupled with uncertainty about working conditions and income, and algorithmic control, can lead to the risk of burnout, which erodes workers' psychological well-being (Bhattacharyya, 2025; Lang et al., 2023; Simatupang, 2025).

The well-being of gig workers is significantly influenced by where and how they move within the vast urban space, not just by working hours or wages (Griesbach, 2025). Previous research has shown that high mobility, the absence of a fixed workplace, and exposure to uncertain environmental conditions create spatial precarity that impacts workers' physical, psychological, social, and economic well-being (Nilsen & Kongsvik, 2023; Ray, 2024). Research by Blázquez et al. (2024) shows that gig workers experience complex well-being effects such as low subjective health, high job risks, and uncertainty about social rights.

However, the impact of job uncertainty is not uniform across all gig workers. The ability to learn from experience, apply new learning, and adapt to new situations is called learning agility. According to DeRue et al. (2012), learning agility is a combination of personal characteristics and traits that enable an individual to develop or refine their knowledge and skills in active response to various changes. Through learning agility, gig workers can leverage work experience into rapid adaptation skills to face the challenges of the uncertain platform economy (Moghavvemi et al., 2023).

Research on the gig economy tends to focus on economic vulnerability, algorithmic control, and work discomfort, but lacks a deeper understanding of how geographic and spatial dimensions influence worker well-being. The concept of geo-occupation well-being, which integrates the influence of location and mobility on work well-being, has not been widely applied to gig workers. Psychogeospatial research on well-being has further developed from a study conducted by Yoshino & Oshio (2021), which showed that individual well-being is significantly influenced by differences in geographic characteristics and regional context. Analysis in Japan revealed that spatial factors such as regional economic conditions, urbanization levels, and access to social resources play a significant role in shaping variations in subjective well-being across regions. This is supported by the ecological influence concept (Rentfrow et al., 2008), which asserts that a region's natural and social conditions play an active role in shaping individual behavioral tendencies and psychological well-being. These findings confirm that geographic space and regional structural dynamics play a crucial role in understanding individual psychological well-being.

Meanwhile, learning agility has begun to be widely explored in traditional organizational contexts (Jeong & Sung, n.d.; Miley, 2020; Nareswari & Astuti, 2025), but its application to the gig worker context remains limited. This research focuses on

the key question of how learning agility influences gig workers' GOWS amidst constant spatial change and uncertain working conditions. Specifically, this study examines whether learning agility can function as a crucial personal resource in navigating challenges while maintaining one's work well-being. In line with this, the objectives of this research are to identify conditions of geo-occupational well-being relevant to gig workers, explore the concept of learning agility within the spatial dynamics of the platform economy, and analyze the relationship between the two based on existing literature. This paper is systematically organized into four main sections: introduction, literature review, discussion or analysis, and conclusion.

2. METHODOLOGY

This research uses a literature review approach with data collection techniques carried out through searching, understanding, and reviewing various scientific findings sourced from written literature, such as books, journal articles, and other academic sources relevant to the research topic (Fadli, 2021). The existence of scientific literature in research is a fundamental element, because it functions as a conceptual basis in building arguments and a research framework. Creswell & Creswell (2018) define a literature review as a systematic and analytical scientific compilation of various academic sources, such as books, journal articles, and other scientific documents. Its purpose is to present a narrative synthesis that integrates major theories and empirical evidence, both historical and contemporary, relevant to the research focus.

The literature search process is carried out in an exploratory and reflective manner, by examining scientific sources that are relevant to the issue. The literature used was not restricted by strict inclusion and exclusion criteria, but rather was selected based on its conceptual relevance and theoretical contribution to the development of the research narrative. This approach allows researchers to integrate various theoretical perspectives across disciplines and build a holistic conceptual understanding of the research topic.

3. FINDINGS AND DISCUSSION

3.1 Geo-Occupational Well-Being

Geo-Occupational Well-being combines spatial (geographic) data with occupational well-being indicators. This approach is based on the assumption that worker well-being is influenced not only by individual factors and organizational policies, but also by the spatial context and work environment, such as location settings, space design, and the accompanying physical and geographical conditions (Bergefurt et al., 2022; Choi & Moon, 2017).

Occupational well-being is understood as an individual's positive assessment of aspects of their work, encompassing affective, professional, social, cognitive, and

psychosomatic dimensions (Horn et al., 2004). The concept of geo-occupational well-being expands Horn et al.'s (2004) occupational well-being by integrating the spatial dimension, which is relevant to the context of gig workers. The affective dimension encompasses mood, job satisfaction, organizational commitment, and emotional exhaustion. Wu et al. (2022) stated that gig workers who work according to their location experience affective states (fluctuating feelings), which tend to fluctuate according to the characteristics of the work location they encounter. The dimensions of professional well-being include motivation to seek challenges, competence or confidence in dealing with problems, and autonomy in work. In the context of gig workers, identifying and optimizing their spatial conditions is a crucial aspect of professional competence. Meanwhile, social well-being focuses more on the quality of social functions in work relationships. In the context of gig workers, they develop socio-spatial information networks, namely location-based communities to share information about safe zones, rest areas, and income optimization strategies (Ray, 2024).

Research by Nguyen-Phuoc et al. (2023) shows that highly mobile work can lead to cognitive fatigue, increased workplace accidents, and a higher risk of burnout (Useche et al., 2024). This is related to the psychosomatic dimension, which refers to physical health complaints such as headaches, cardiovascular problems, and other health issues. In the context of GOWS, the spatial dimension serves as a contextual factor that can moderate and mediate the relationship between the dimensions of well-being. The spatial dimension places greater emphasis on spatial or geographical conditions, and mobility can impact employees' overall work well-being.

3.2 Spatial Challenges as Organizational Change for Gig Workers

Literature findings indicate differences in organizational change across contexts, platform economy, which took place very quickly, quietly, and with minimal formal support, was different from organizational change in a traditional context, which is generally accompanied by formal communication, training, and support systems (Bhattacharyya, 2025). Work management is carried out through algorithmic management who utilize artificial intelligence and machine learning to manage task allocation, assess performance, and even impose sanctions or punishments, functions previously performed by human supervisors (Wan et al., 2024). Under these conditions, algorithms can be updated without notice, work areas can be changed without involving workers, and pricing systems can be adjusted without process clarity.

Previous literature indicates that changes triggered by digital platforms have a spatial dimension that directly affects the geo-occupational well-being of gig workers. In location-based work, gig workers must face a multi-location workload, namely the demand to constantly move and adapt to diverse geographic characteristics, ranging from traffic density, differences in customer demographics, to varying levels of safety risks between regions. These findings indicate that platform economy systematically transfers operational risks and work environment adaptation to individual workers, while platforms act as digital intermediaries that are relatively free from consequences

(Acs et al., 2021; Van Doorn et al., 2023; Wood et al., 2019). Therefore, the ability gig worker to learn from previous location experiences and quickly adjust work strategies is a critical factor for both their work efficiency and well-being.

A consequence of algorithmic management is geographic uncertainty, which is amplified by the information inherent in algorithmic systems, where the platform's decision-making logic is not fully transparent to workers (Kellogg, 2006; Möhlmann et al., 2021). Platforms can unilaterally change operating zones, incentive schemes, or regional priorities in real time, so that they can create ambiguity regarding the optimal work location for gig workers to maintain income and well-being. Several studies have shown that online transportation drivers, as gig workers, are often directed to areas with low income potential without adequate explanation, leading to frustration, emotional exhaustion, and decreased work well-being (Tassinari & Maccarrone, 2020; Theonia & Prabhughate, 2024).

In addition, variations in infrastructure between regions emerge as an important contextual factor in shaping the geo-occupation well-being of gig workers. Access to basic facilities such as rest areas, restrooms, shelter from extreme weather, and safe spaces to stop working depends heavily on the geographic conditions of the work location. Literature findings confirm that these infrastructure limitations require gig workers to continuously engage in spatial learning and adaptation, namely the process of independently recognizing, mapping, and utilizing environmental resources (Apouey et al., 2020; Rani & Furrer, 2019). Although the platform formally offers flexibility in work location, in practice, many gig workers have very limited choices, which can ultimately lead to social isolation and reduce psychosocial well-being (Zhang et al., 2022).

This situation creates a paradox of autonomy, where gig workers appear to have the freedom to determine their work time and location, but at the same time, they are heavily controlled by algorithmic rules that also act as limitations when working (Wan et al., 2024; Wood et al., 2019). It is under these conditions that learning agility emerges as an enabling capability that gig workers adapt cognitively, behaviorally, and emotionally to ongoing spatial changes.

3.3 Learning Agility as an Adaptive Mechanism in the Spatial Context of Gig Workers

Literature shows that learning agility serves as a primary adaptive mechanism for gig workers deep facing spatial precarity, a working environment characterized by high mobility, location uncertainty, and limited control over the work environment (Van Doorn et al., 2023; Wood et al., 2019). These conceptual findings indicate that learning agility enables gig workers to respond to spatial uncertainty actively, rather than simply reactively. Gig workers with high mental agility tend to engage in active, experiential

learning, such as trying out different work zones at different times and evaluating the consequences for income, fatigue, and safety.

In line with Teece et al. (2016), who emphasized that the essence of agility lies in an individual's ability to continuously scan the environment and adjust strategies based on dynamic changes. In the context of gig workers, this process manifests itself in the development of spatial strategies, such as building an understanding of demand patterns, traffic, and earning potential in specific locations. Wood et al. (2019) demonstrated that gig workers actively develop adaptive strategies to navigate platform systems, even under conditions of high algorithmic control. Thus, learning agility plays a role in an individual's ability to adapt to new challenges and develop innovative work strategies, including in highly dynamic work environments such as the platform economy (Handayani et al., 2025; Wan et al., 2024).

The people agility dimension of gig workers is reflected in their ability to build and utilize informal, location-based social networks, such as communities of fellow drivers or online forums. Literature findings indicate that this social learning serves as a substitute mechanism for the lack of formal platform support, by enabling the exchange of information regarding safe zones, rest areas, and work optimization strategies (Apouey et al., 2020; Rani & Furrer, 2019). However, literature findings also indicate an inherent tension between collaboration and competition, given the heightened competition for access to high-demand areas. In this context, people agility encompasses the ability to adaptively navigate dynamic social relationships without relying entirely on the platform's structural support.

The platform economy is characterized by rapid and often opaque algorithmic changes, such as changes in incentives, operating zones, or assignment rules. According to Van Doorn et al. (2023), these changing dynamics are referred to as platform volatility, which plays a role in the decline in gig workers' work quality over time. Gig workers with great change agility not only react to these changes but also develop anticipatory strategies, such as monitoring platform update patterns or implementing multi-platform strategies to reduce the risk of dependence on a single application (Wan et al., 2024; Wood et al., 2019). This ability plays a crucial role in maintaining sustainable occupational well-being amidst dynamic changes.

Results agility in workers is demonstrated by achieving optimal results, not simply by working duration. Literature findings indicate that this process involves developing personal analytics, namely self-evaluation of highly mobilized work experiences to determine work strategies that can be used continuously (Möhlmann et al., 2021). In this context, results agility helps gig workers set realistic work boundaries and reduce the risk of burnout and decreased well-being.

Overall, the literature confirms that learning agility among gig workers is the ability to adapt within unstructured, algorithm-based organizations. When organizational change is no longer facilitated through formal training or organizational communication, learning agility serves as a bridging mechanism between platform

structural changes and individual work well-being, particularly in addressing the spatial challenges and work volatility of the platform economy.

4. CONCLUSION

The relationship between learning agility and geographical occupational well-being in the context of gig workers who work under continuous spatial changes due to the dynamics of digital platforms. Based on the literature analysis, several key findings emerge. First, geo-occupational well-being is a relevant framework for understanding gig workers' well-being because it captures the geographic and mobility dimensions of work, which have received little attention in occupational well-being research. Unlike traditional workers, gig workers face high levels of spatial vulnerability, necessitating a theoretical approach that considers location, movement, and the uncertainty of the work environment.

Second, learning agility serves as a crucial adaptive capacity that helps gig workers navigate spatial challenges and maintain well-being. Learning agility relates not only to the ability to learn work tasks but also to the ability to continuously adapt work strategies to address changing locations, risks, and dynamic work demands. Third, the relationship between learning agility and geo-occupational well-being is manifested through spatial adaptation strategies, such as managing work zones, establishing realistic work boundaries, leveraging social networks, and optimizing environmental resources. This suggests that learning agility needs to be supported by real opportunities and capacities for learning to translate into adaptive action. Finally, research indicates differences in the levels of learning agility among gig workers, which contribute to inequalities in well-being, influenced by work experience, digital literacy, access to resources, and the structural design of the platform itself.

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