

**THE EFFECT OF GIG WORK ON EMPLOYEE WELL-BEING:  
MEDIATING ROLE OF WORKPLACE FLEXIBILITY**

**Muhammad Usman Khan**

PhD Scholar, Business Administration & Social Sciences Department, Iqra  
National University, Peshawar. [m.usmankhan650@gmail.com](mailto:m.usmankhan650@gmail.com)

**Dr. Amna Ali\***

Professor, Business Administration & Social Sciences Department, Iqra  
National University, Peshawar. Corresponding Author Email:  
[amna.ali@inu.edu.pk](mailto:amna.ali@inu.edu.pk)

**Dr. Faisal Sheraz**

Associate Professor, Business Administration & Social Sciences Department,  
Iqra National University, Peshawar. [dr.faisal@inu.edu.pk](mailto:dr.faisal@inu.edu.pk)

**Abstract**

This study investigates the relationship between gig work and employee well-being, with a focus on the mediating role of workplace flexibility. As the gig economy continues to reshape traditional employment models, understanding how these flexible arrangements affect worker outcomes has become increasingly important. Drawing on the Job Demands–Resources (JD-R) model and Self-Determination Theory (SDT), this research explores whether workplace flexibility can explain how gig work influences well-being. Included among the 346 gig workers the data were gathered based on standardized scales of gig work, workplace flexibility, and well-being. The statistical tests that were carried out such as regression analysis or Mediation analysis through the PROCESS macro showed that the level of gig work improves significantly the well-being of the employees, and that this connection is in part mediated by flexibility at work. This research also gives attention to the relevance of autonomy and flexible work arrangements to positive psychological outcomes in gig workers. The paper has theoretical implications and practical implications on platform designers and policymakers interested in the sustainable employment in the gig economy.

**Keywords:** Gig Work; Workplace Flexibility; Employee Well-being; JD-R Model; Self-Determination Theory; Mediation Analysis; Gig Economy; Freelancers; Platform Work; Flexible Employment

### **Introduction**

The advent of the gig economy is thus a revolutionary change in the worldwide workplace, as short-term contacts and freelance labour are now the borrowed mode of labour conduct, as opposed to the employer-employee approach. This paradigm transformation has a far-reaching impact on employment structures, labor market, and welfare of the employees in general. Gig economy offers new freedom and liberty to the workers although it exposes them to severe jobs insecurity, corporate practices, and social safety nets questions. These characteristics of gig work have kept on gaining importance in different fields especially with regards to changes that take place regarding the traditional employment system to embrace a more accommodating labor market. As an example, Talukder et al. (2025), emphasize that the emerging gig economy has significantly transformed the nature of work in different sectors since it has presented new ways of work relations. The same spirit is recited by Ruyter and Brown, as they remind that although gig work offers flexibility, it also makes most people have a precarious work environment, and therefore, multiple changes awaiting the regulations in order to keep up with such trends (Ruyter & Brown, 2019). The practical need to restructure regulatory frameworks in order to safeguard gig workers is now of highest priority, as the currently existing labor laws do not always align with the existing trends of a gig workforce. In addition to that, the study by Hu and Fu explains that technological changes in the gig economy are not the only factor shaping its new patterns because the current market conditions and state policy also determine its evolution (Hu & Fu, 2021). With the adjustments in the market climate, the liking and the methods of the gig workers are shifting as well,

demonstrating that there is a complicated interaction linking the general conditions and personal decisions. As an example, the nature of labor and the high-skill sectors might shift differently than low-skill arenas, implying that the sectoral consequences should be evaluated during discussion of labor dynamics.

The review of literature reveals important implication to the workers and the employer operating in this new economy. Jain and Rani Jain & Rani, (2024) explain that these trends are transforming the historical forms of employment and how gigs are a chance to work and an opportunity to struggle. They observe that though gig workers have greater freedom than ever before, this freedom contributes to an increase in the levels of insecurity and any possible negative impacts on their well-being. Such insecurity is additionally supported by the findings of Lakshmanan that tries to shed light on the unequal numbers of the gig economy whose workers struggle to adapt to the conditions and employment security (Lakshmanan, 2025). The two essential elements displayed as the gig economy spreads are the psychological influence on the workers and the cultural environment that may determine the level of engagement of the employee. According to Thomas and Baddipudi, leadership and organizational culture appear to be of major influence on job satisfaction and commitment (Thomas & Baddipudi, 2022). It could be compared to the results of Woon et al., who also point out the importance of the psychological well-being of gig workers and state that the feeling of isolation, and the absence of social support significantly influence the engagement and the well-being of gig workers (Woon et al., 2022). This precarious institutionalized status is what makes it all the more important that organizations take this issue into consideration and develop the supportive conditions that would not only lead to the retention but a positive mental health outcome as well. Since the issue of regulatory space that is discussed by Peetz who believes that regulations aimed at minimizing the risks of gig work need to be developed, it is essential to implement labor protection (Peetz, 2023). Besides, Tkachenko

et al. can develop the possible models of social protection that enable to alleviate the negative outcomes of gig work by introducing the legal issues and discussing the new employee protection in this economy (Tkachenko et al., 2024). Lack of complete legal protection exposes works to exploitation though they cannot enjoy other benefits that come with conventional employment. The effects of gig economy on employee predictability as well as general job satisfaction require comprehension of its full scope. Most of the research, such as by Duhaime and Woessner, pays attention to the manner in which changing work culture contests current paradigms regarding compensation and employee-employer relationships (Duhaime & Woessner, 2019). To give an example, the shifts in tipping practices in the gigs industries including ride-sharing services are examples of how earnings and employee expectations are transforming.

An important aspect that should be put into perspective is the demographic element of gig work especially in relation to job satisfaction and engagement. Giang et al. suggest a framework that can be used to analyze the correlation between corporate social responsibility (CSR) and gig workers commitment, stating that empowerment and trust are important mediators that influence the total support (Giang et al., 2024). It means that even independent gig workers need to be connected and recognized in their workplaces to be able to succeed. As observed by different authors, the swift expansion of technology in the context of the facilitating of the gig work begs the question regarding the future of labor relations. What numerous researches point to is that technology creates new opportunities, but at the same time has significant burdens on the labor market. As an example, the influence of algorithmic management has become a core point of several analyses, such as the one by Ncamane who has asked how the status of a gig worker as independent contractor was established and what the absence of any social protection has led to (Ncamane, 2023). This indicates that redefined definitions of the worker status are highly needed to ensure the

rights and benefits of people working in gig positions. In-depth consideration of the gig economy indicates not only the systemic change of the labor market but also a socio-economic paradigm that affects the livelihood of an individual and the well-being of the community. Gaidampas offers a grandiose perspective of it as a paradigm that has just emerged and necessitates a critical reflection of the accepted employment processes and standards (Gaidampas, 2025). Gig economy entails workers to transform into entrepreneurs of their labour but it also involves the pressures associated with job stability, stable earnings and psychological issues that need to be taken into account. To sum it up, switching to gig work requires a multi-dimensional solution that includes control, infrastructural enhancement, and mental health enlightenment to make sure that job seekers could use the advantages of freedom of work and keep the risks and weaknesses to the minimum. In future studies, researchers must concentrate on the creation of responsive policy systems, where the flexibility of the workers is balanced by protection so that the gig economy is established as a spearheading to modern labor instead of a gate to insecurity. This discussion about the gig economy will be central to the development of the work relations of the 21 st century and future, and relevant stakeholders in various sectors need a consistent level of participation.

The growth of the gig economy represents a major change of work patterns and modes of employment. With the increasing gig work, the effects of this shift on the well-being of workers present an important research field underrepresented in research. This raises a research opportunity especially considering how the flexibility of workplaces mitigates the connection between the gig work and employee well-being. The goals of this study are to clarify how gig work impacts the well-being, how workplace flexibility mediates the above effect, and the inequality of this flexibility across different groups of gig workers. Although the number of people working in gig jobs has significantly increased, the literature indicates that the debate on



psychological and emotional situation of the workers is still emerging. The importance of this gap is highlighted by the analysis of the effects of such factors as task management and social support on the improvement of work-life balance among gig workers, which is provided by Yusof et al. Yusof et al. (2024). Their results reinforce the importance that has long been emphasized by structural supports of traditional jobs, gig workers are likely to lack. Personal social networks are associated with the mitigation of stress and protection of mental well-being. When it comes to analyzing the psychological foundations, Wu and Zhou Wu and Zhou (2022) apply a fuzzy set qualitative comparative analysis to determine how the relationship between basic psychological needs and well-being works among gig workers when investigated on Chinese platforms, such as DiDi. They observe that in terms of particular psychological needs, gig work may be able to satisfy them, but more often we are faced with that this factor has its ups and downs and is under the influence of extrinsic forces like health crisis, due to which it ultimately risks their existence and welfare, thus, showing the dire necessity of a better awareness of how workers experience it and what issues they face. Keith et al. (2019) reconcile qualitative and quantitative insights to demonstrate how diverse groups of gig workers and their experiences stand out in terms of differences. Based on their analyses, they suggest that the unsustainable gigs are likely to produce high forms of satisfaction and well-being in different people especially due to the dependency levels they hold on the gig work as their major source of livelihood. These gaps prove that the intricate landscape of the gig economy has to be further investigated with alternative approaches.

Barrios et al. (2020) also make their input into the debate by focusing on the connection between the gig economy platform and the entry of a worker into the domain of entrepreneurship. They emphasize that although then gig employment might act as a starting point of business operations, it can also be a source of constraints in worker welfare as gig work has various uncertainties and competition that can hinder generous approaches to worker

welfare. This dichotomy is a reference to the need to dig deeper into how flexibility in the gig economy is affecting or impacting positively or negatively the welfare of the workers.

Continuing the exploration of the theme of flexibility in the workplace, Healy et al. (2020) address how the consumers perceive the flexibility of the gig work putting particular emphasis on the societal values associated with the autonomy granted by gig jobs. According to their analysis, such flexibility appears to be attractive, but it is associated with some invisible expenses that impact the satisfaction and the overall health of workers. Hence, they demand a reconsideration of the frame of flexibility in the logic of gig economy. When discussing the connection between the flexibility and the well-being of the workers, we cannot underestimate the effects that COVID-19 has had on the gig workers. Joo & Shawl (2021) champion on the aspect of how the pandemic has increased and expanded the experiences in the world of the gig economy. They present evidence that shows the flexibility of gig work, which may increase instability and stress in tense moments, highlighting the importance of formal protection of gig workers in unstable moments. The research presented by Li et al. (2022) explores the well-being of gig workers on the instance of sharing economy during the pandemic in greater detail, their findings showing why such theories as worker agency and the ability to self-determine should be developed. Their work can be matched to future scholarly topics concerning a comprehensively developed interest in well-being concerning gig workers by paying close attention to multiple aspects of the nature of the working environment. In more recent studies, Bajwa et al. (2018) focus on investigating health disparities among gig workers, stating that the common health indexes of a worker need to be modified to accommodate new factors introduced by gigs that a worker has to endure. They show that gig workers are vulnerable to a number of health problems caused by economically precarious conditions, meaning that effective mitigation strategies should examine not only the economic side of the problem, but also

the psychological consequences it might entail. In addition, Marquis et al. (2018) critique emotional labor and perceived behavioral control with regard to gig workers. All of these aspects make a great contribution to their general satisfaction and capacity to manage job stress, which proves the importance of flexibility as an influencing factor of the well-being of gig workers. An in-depth examination of the interrelationship between the emotional dynamic and the job structures brings out crucial links between the job condition and personal well-being. It is essential in this discourse to have a grasp of the nature the various types of gig workers have when it comes to experiencing flexibility in the workplace. Koutsimpogiorgos et al. (2020) highlight the issue of regulation that several categories of gig workers have to cope with, and it involves the effects of different types of classification upon flexibility and benefit of workers who perform in different categories. The classification-perceived flexibility nexus paves the way to essential knowledge on the nature of the lived experiences of gig workers in various organizational structures.

There exists a strong indication that a deeper understanding concerning the well-being of gig workers is imminent preferably through comprehensive strategies of addressing the knowledge gap. These dimensions have been encompassed by Haque & Dard (2023) where they discuss well-being in economic, psychological, and social aspects, and it can be supposed that multi-dimensional approaches to well-being are confirmed. With the synthesis of the findings, this study will aim at designing effects of gig work on employee well-being and lay out some guidelines to acceptable workplace flexibility mediating effects. The studies by researchers like Wan et al. (2024), which assess job autonomy and its effects on the well-being of gig workers, present a fantastic possibility of being the starting place of further research, as it would enable analyzing trends that affect the resilience of workers in a gig setting in detail. Notably, the study of the varieties in the population of gig workers, which is identified by Trã and Pham (2024) constitutes a possible direction of future research. These research works show how generational



differences may change the perception of workplace flexibility and alter job satisfaction and well-being in general. This subtle examination encourages the debate about the influence of generational effects on gig work that determine mental predisposition and level of satisfaction. In the future of gig work research, it is some sort of necessity to bridge the gaps that pertain to the mental, emotional, and psychological consequences of gig work as there are glaring gaps that need to be filled. The study of this area can help to conduct useful policymaking and introduction of practical interventions to improve the welfare of gig workers. More importantly, with the changing character of work, there has to be a change in the templates used to assess its effects on the people engaged in this dynamic work scene. Overall, this study will substantially extend the understanding of the nature of issues in which gig work is entangled, including preferences toward workplace flexibility and the way in which this factor affects the well-being of different categories of gig workers. This study aims to make an original contribution to the ongoing discourse about work, well-being, and the gig economy's future.

### **Research Questions**

- RQ1: What is the effect of gig work on employee well-being?
- RQ2: What is the effect of gig work on workplace flexibility?
- RQ3: To what extent does workplace flexibility influence employee well-being among gig workers?
- RQ4: Does workplace flexibility mediate the relationship between gig work and employee well-being?

### **Hypotheses**

H1: Gig work has a significant effect on employee well-being.

H2: Workplace flexibility is positively associated with employee well-being.

H3: Gig work is positively associated with workplace flexibility.

H4: Workplace flexibility mediates the relationship between gig work and employee well-being.

### **Significance of the Study**

This research has a great theoretical and real-life importance. Theoretically, it can add to the existing corpora of studies covering the non-traditional forms of employment models, especially gig work, and their complicated response to employee welfare. Although most of the current literature has been dedicated to the traditional employment environments, the current study switches to the previously unknown and newly emerging environment of the gig work, where the benefits of independence and flexibility are widely discussed, whereas the possible negative aspects, namely job insecurity and a lack of support in an organization, are commonly ignored. This study also enriches our knowledge base on the vulnerability or compensating nature of particular job natures by studying the moderating effect of workplace flexibility. It mediates between valuable concepts of the Job Demands-Resources (JD-R) model and the Self-Determination Theory (SDT) and provides insightful understanding of the way in which resources, such as flexibility enhance positive psychological and emotional well-being in workers who do not have to work within the scope of traditional employment. In practice, the results of this research have practical consequence on both gig platforms and policymakers who are interested in establishing work arrangements that promote worker well-being. The focus on the flexibility at the workplace as a key mediating variable of interest, the research emphasizes the importance to develop structures and policies that maintain or maximize the workplace flexibility of gig jobs, at the same time reducing the burden related to precarious work. By so doing, through this study a guideline towards enhancing a better living and sustainability of the gig workers in the contemporary job market is given.

### **Literature Review**

#### **Gig Work: Definitions and Dimensions**

Working as a gig has taken a central place in the contemporary world of labor, and it embraces various types of jobs, including freelance projects, demand-

based services, and platform-based jobs. These types are significant change in types of employment as it gives the employees some level of autonomy that is not normally found in regular jobs. Nonetheless they have sometimes done so at expense of Job security, making it a paradox which should be explored further in relation to consequences on the well being of workers. According to Waldkirch et al. (2021), such an interaction between algorithmic management and worker relations determines the experience of gig workers on digital platforms. This dependence on algorithms gives rise to a peculiar job supervision that may compromise an individual agency, which further complicates the apparent autonomy that does not always exist among gig workers. This interaction is essential when explaining the reasons why some gigs, like those of ride-share drivers, freelance designers, or online consultants, can be relatively flexible on the one hand and on the other hand can create the conditions in which job security is fragile. In a parallel approach, Leitaio et al. (2019) examine the concept of quality of work life (QWL) which sheds light on how the perceptions on the part of the workers on their contributions influence their job experiences in general. Although it is an essential characteristic of gig work, this feeling of contribution and belonging is normally watered down in informal job settings where such employment is concerned, and security in the job is not that strong. Their research indicates that a greater employee work life quality may arise by adoptive a middle ground between adaptability and a strong support system of the worker.

Furthermore, Soraya and Ardiyanti (2024) focus on the importance of job security as a vice in keeping turnover intentions of employees at bay. Even though it relates to Indonesian rather than American architects, the work is relevant to the gig economy as it targets the precarity that is characteristic of such related jobs, as precarity may cause a sense of insecurity and reduce job satisfaction. This story reflects the situation of gig workers who have to fulfill various jobs without secured income, which proves that more research is needed on the potential effects that flexibility can have on their well-being and

feeling of safety. Bakr et al. (2019) examine the qualities of leadership support and working conditions with a finding that perceived job security positively and directly indicates the effects on job satisfaction of employees, which is a repeated phenomenon in the research field of employment. This relationship throws the disadvantages of gig work in which the lack of support shown by employers may build up the sense of insecurity and discontent. The connection between autonomy and job satisfaction is not always conducive across gig workers and so it would require a systematic approach in addressing work conditions to improve job quality as a whole.

Chang et al. (2021) offer a thorough analysis of job environment dynamics and present the argument according to which job autonomy, being arguably one of the core features of gig work, is rather problematically connected with career commitment. In their study, they argue that, workplace flexibility may transform the attitudes of employees, and in the gig employment, the two sides of the coin do offer chances of being engaged or disengaged in the light of the external contexts. This implies that job crafting and personal agency has the potential to provide solutions, lead to increased satisfaction among gig workers, which is a necessity considering the labor-intensive environment in which freelance workers have to perform. When looking at the issues affecting gig workers, there is a critical need to embrace the implication that their different experiences depend on the type of jobs they do. It is contributed to the increased autonomy that comes with digital gig platforms and can result in counterproductive work behaviors in case it is not managed properly, an analysis presented by Shanshan & Liu (2024). Their findings underscore the values of the operators of the platforms to provide supportive steps to create the healthier and productive working space to adapt to the roles of gig workers. The repercussions of job insecurity do not escape across the gig work spectrum. Ahmadi et al. (2022). Haiqing et al. (2022) explain how perceived job insecurity can influence the personal decision-making process and psychological health, and it becomes clear that the

corresponding fears and worries can set people back considerably both during the working process and overall life satisfaction. In the case of gig workers, who often work without attaching themselves to a highly defined job and job benefits, such findings pose a strong argument to investigate further on how it is possible to enhance job stability in the already gig-specific economy. To conclude, the influence of gig work on employee well-being needs to be studied utilizing multiple aspects. By investigating the specificity of the role of flexibility at work as the mediator of the relationship between the two discussed types, researchers can clarify the divergent development of satisfaction with work both in freelance and platform jobs. According to Yuanto et al. (2022), strong job security systems develop more favorable conditions of interaction and work, promoting the introduction of policy in response to gig workers and their multi-faceted reality. Overall, the increased attrition of gig work opens opportunities to find their independence and problems concerning employment security. Although the diversity of the gig positions is still quite prominent, it is becoming apparent that to draw appropriate conclusions on how they affect the well-being of workers, a more profound analysis of the workplace organization and personal experience is needed. Research in the future must focus on these dimensions to ensure that the gig environment is in its happiest state with individuals working on various platforms in various jobs.

### **Employee Well-Being**

Such a thriving gig economy significantly affects the health of its employees, whereby different aspects of well-being in terms of physical, emotional, and psychological aspects interlink with job satisfaction. Since the employment status of the so-called gig workers is usually unstable, and incomes are unstable, the consequences of this state of affairs on their general health condition can hardly be overestimated. It follows that the comprehension of these aspects presupposes an analysis of the available research results that can lighten the distinctive challenges and pressures characterizing the gig work



experience. Recently, Wang et al. (2022) shed light on the result of the mental health state and life satisfaction among gig workers and found that a strong correlation existed between financial precarity and psychological well-being. According to their study, loneliness plays an important role toward the mental health burden and the importance of financial insecurity characteristic of gig jobs as being central in determining emotional and psychological wellbeing. This highlights the comprehensive nature of well-being that does not only involve a person being both emotionally and mentally sound but also affected by fluctuating incomes. Along with this statement, Svetek (2020) discusses how this circumstance led negatively to the psychological well-being and job satisfaction levels, which is worsened under the circumstances of gigs employment. Their results indicate that though it is possible, theoretically, that some aspects of employability and income security would theoretically offset some psychological strain linked with chronic job insecurity that comes along with gig jobs, not all negative implications of being chronically exposed to the possibility of losing employment inherent in gig work are reduced.

This points towards a certain propensity to being vulnerable on the part of gig workers, who do not only face the precarious condition of financial insecurity but also are affected by relation distress due to absence of employment security. Moreover, Huang et al. (2024) pose the definition of withdrawal behaviors in gig workers and associate their work experiences of job demands and emotional labor to the overall job satisfaction. That also indicates how the emotionally demanding gig work can hinder well-being. Their research findings demonstrate the distinct barriers experienced by gig workers in their attempt to treat autonomy and the emotional pressures caused by their work conditions, and therefore further convoluting conventional methods of job satisfaction. Developing the same idea, Palhad et al. (2023) consider the thoughts of gig employees about the health hazards that they face, including the psychological distress caused by the uncertainties of their job. They also explain the negative impacts of poor health insurance

and widespread psychological stress on the overall wellness of workers, which is typical of the gig economy because it tends to fuel health inequity. Their results indicate the need to increase health protections and guarantees, especially those who work in apparent precarious jobs.

Moreover, Keith et al. (2019) believe that most gig employees are in a complicated situation that worsens their work satisfaction levels and the quality of their life. By pointing out that a dependence on gig work as one of the main sources of income is likely to be associated with increased security insecurities, they emphasize further action should be taken to enable gig workers. This belief manifests itself through their studies and will demonstrate how stressful it is to live in a world where money is often unattainable and always scarce. Gori & Topino (2020) suggest looking further into the mediating role of the workplace civility and insight in mediating job satisfaction in employees in the consideration of the implications of job conditions to their well-being. Their results indicate that excellent workplace relations are very significant in job satisfaction. This observation is specifically applicable to gig workers, who are usually not provided with support systems as in the case of salary employment. The key to the healthiness and productivity of gig workers might lie in the way organizations help them feel part of something bigger as well as support. Even though this might not be available in the context of a gig environment, organizations have an opportunity to improve the situation that way. He et al. (2021) add further to this story, studying how gig workers adapt after receiving unfair treatment by customers, arguing that such internal variables as work meaningfulness and psychological resilience are decisive. Both of these suggestions that gig employment may be associated with flexibility, but its work also requires considerable emotional and psychological control which shows the complicated relationship between job satisfaction and emotional health in the gig economy. The Nunes et al. (2024) studies also note that there is a necessity to have a wider understanding about the job demand imposed on gig workers,

and the impact they have on their psychological well-being. They indicate that support measures should be integrated into gig systems, which can help remove some of the mental health problems of such workers. Apparently, the complexities of the gig economy deal with more than mere monetary factors: they touch critical areas of human well-being. Emotional resilience, social support and workplace relationships impact the job satisfaction and the overall outcome of mental health significantly. The varied discussion of gig work requires additional research to outline the specifics of employee stories and support frameworks that promote the well-being of employees in the face of an increasingly popular trend incorporating gig work. Therefore, the integration of the literature leads to highlighting that to support the mental and physical state of gig workers, systematic changes are necessary, and the job satisfaction of the latter can also be improved with new security systems. It is important to note that well-being in gig work is not only measured in income but also in terms of relations, emotions, and psychology, which should be recognized when creating policy and support networks among this fast-growing group of gig workers.

### **Workplace Flexibility**

The flexibility of the workplace is also a feature of the gig working environment since workers have the freedom to dictate their schedule, places of work, and tasks. Such flexibility is usually referred to as one of the key benefits that characterize the phenomenon of gig employment. The literature has understood this dynamic extensively, providing potential insights on the role of flexibility in the gig work environment and its effects on worker satisfaction and well-being. Wood et al. (2018) underline that gig economy, namely platform-based jobs, provides great spatial-temporal flexibility and allows to consider a high degree of autonomy. Their study emphasizes the difference between the conventional jobs ideated by the Taylorist concept and the freer form of gig work, which potentially can result in the increased diversity of activities and greater job satisfaction. The authors believe that

algorithmic management enables workers to get more versatility and flexibility of task as well as issues on management and control by platform algorithms. Various research studies on the platformed gig economy are reviewed in a systematic literature review study by Dedema & Rosenbaum, (2024), in which the authors discuss socio-technical issues in the platform-mediated gig economy and how workplace isolation tames the potential advantage of flexibility. Responding to the absence of social interaction and career development potential, their evidence supports why gig work flexibility is complex, especially the sacrifice of independence or autonomy versus social connectedness. Jayakarthika et al. (2024) outline the characteristic malleability of gig work as it changes classical hiring and performance management procedures. According to them, the characteristics of the gig economy, including the mentioned flexibility, the digitalization of the environment, and the freelancer status force the modification of the existing procedures of hiring people and attaining talent, meaning that HR departments have a lot of work to do when embracing the concept of gig workers in their organizations. Moisander et al. (2017) refer to experiences of precarious workers within the framework of a gig economy to note how flexibility is brought in through different self-employment and contracting frameworks. The authors indicate that such flexibility may be attractive but in many cases there is entry into the realm of dependency and vulnerability which is another way of saying that autonomy is not always synonymous with security.

Healy et al. (2020) concentrated on consumer opinions about gig work in Australia and found that a considerable portion of the people appreciate the convenience that gig work brings. They observe that not only is such flexibility an important selling feature of platform companies, but increases their attractiveness as workers to the prospect of sacrificing job security and workplace stability. This highlights a controversial association in which

flexibility can enhance as well as make the experience of working in gig disperse.

Reynolds et al. (2024) discuss the significance of striking the balance between the lack of actual flexibility and dependence on platforms within gig employees. In their studies, they propose that employees are more pleased with the freedom to choose when and how their work done, and flexibility is not only practicable in the workplace but also implies a more enjoyable and productive working life. The authors of the article by Chin & Yean (2021) argue in favor of the point that digital platform workers have autonomy and flexibility that can serve as the sources of additional income. They observe that the issue of HR management must change to accommodate the changing nature of the gig employment to facilitate an effective collaborative relationship between the traditional workers and the gig workers. Klein et al. (2024) emphasize that the possibility to set their own work schedule is one of the major appeals of working in a gig, and finding that a large majority of gig workers are attracted to flexibility, especially those who drive with apps such as Uber. Such willingness to be in control demonstrates the importance of autonomy as one of the main determinants of the satisfaction and well-being of gig workers. Interconnections between the topics of autonomy and flexibility are vital to the interpretation process of the gig work that advents a disruption of familiar dynamics of employment. As demonstrated in the literature, flexibility has its clear advantage but it is important to remember about the associated challenges and the impacts of this dynamic on keeping the employee satisfied with their jobs and protecting their welfare. Further studies can also examine the multidimensional effects of flexibility at the workplace, including on an individual level as well as on the level of the society as a whole.

### **Theoretical Framework**

The two-dimensional typology Job Demands Resources (JD-R) model refers to the fact that job stress has its own risk factors that can be marginalized by



two broad dimensions, i.e. job demands and job resources (Demerouti et al., 2001). Job demands (e.g. workload, emotional demands) may give rise to burnout under extreme circumstances but job resources (e.g. autonomy, feedback, flexibility) are vital in inspiring employee and improving well-being. To be more precise, the presence of job resources, including workplace flexibility, may serve as a protective factor against the adverse effects of high job requirements and lead to the exposure to less strain and subsequent engagement (Bakker & Demerouti, 2007). In parallel with this theory, Self-Determination Theory (SDT) developed by Deci and Ryan (1985, 2000) stresses that the realization of three primary psychological requirements: autonomy, competence, and relatedness is the primary characteristic of good functioning and healthy well-being. One of them, which is of crucial importance to psychological health, is autonomy, or a sense of volition and control over one's documentation rival to work. By feeling that they can choose how, when and where they would work, individuals are to feel more motivated and satisfied hence needed to have sustained mental health and productivity (Ryan & Deci, 2000). The theoretical approaches discussed in relation to gig labor, where flexibility can become the hallmark, identify the possibility of such arrangements causing as well as preventing well-being in accordance with the balance of autonomy and job requirements.

### **Hypotheses Development**

One of the hottest topics is the correlation between gig work, feasibility and well-being which suggests that gig employment and its inherent characteristics of flexibility in terms of work hours, locations and integration of tasks can be associated with numerous benefits to workers well-being. The next sources can be referred to as evidence regarding the hypotheses of the autonomy and flexibility involved in the nature of gig work and how it affects the well-being of workers. The study by Rianty & Darma (2025) focuses on a positive correlation of job flexibility and performance. They indicate that

because gig workers have greater job flexibility, their performance increases, and this is one of the ways in which a sense of autonomy in the work arrangements would be able to improve well-being. This highlights the first hypothesis, H1, which states that gig work can enhance well-being due to the fact that it is associated with greater autonomy.

The study on worker perceptions in gig economy (Antloga and Huđek 2024) reveals a lot about the perceptions of the benefits of gig work, such as flexibility, being widely distributed across demographics. This fits in the argument that gig work promotes well-being due to various types of autonomy, which proves H1. The study by Guduru & Santhanam (2024) targets location-based gig workers and considers the extent of such a favorable influence on its performance and well-being through aspects such as flexibility. It is corroborated in their findings that both these factors greatly affect the performance and satisfaction of gig workers and serve as a solid foundation of hypothesis H1.

Shahzad (2025) examines that the flexible conditions of gig work ascertain the work as meaningful to immigrant IT workers in Finland. This study supports H1, despite the fact that other past studies found nothing or less in terms of autonomy contribution to feeling of purpose amongst gig workers. Shakil (2024) explains why varying sources of income may exist in gig work in Malaysia because the latter is flexible in nature. The flexibility depicted is put in terms of being a key ingredient supporting well-being and adding to the positive side of job autonomy (H1).

*H 1: Gig work bears a considerable impact on the well-being of the workers.*

As Keerthana and Madhumitha (2025) show, flexibility is also crucial: it allows keeping gig talent alive and interested. According to their results, employees place focus on flexibility and place of work where gig work is considered instantaneously flexible. They also imply by their work that flexible working arrangements yield positive results in the overall job satisfaction thus supporting hypothesis H2 that flexibility positively influences well-being.

According to Guduru & Santhanam (2024), the finding is affirmative, where job flexibility has a positive influence on levels of performance and well-being in gig workers. Their study in evidence explains that workplace flexibility is not just a job characteristic but a source of well-being, and they endorse H2. The study by Harun et al. (2020) points out the way in which digitalization offers flexibility that would contribute to the tendency towards the gig job of workers. In the conclusion that puts an emphasis on the duality of flexibility and its value both as a motivator and a stressor, the study supports H2 and its contribution to generating well-being.

*H2: Flexibility at work correlates with worker wellness in a positive way.*

In his article, Anan (2024) presents the development of the employment law in the gig economy, emphasizing the use of hybrid employment forms. Although it mainly responds to regulatory issues, the fact that flexible is supposed to be a major component of gig work models helps prove H3 that gig work is designed to make everything flexible, which makes it more desirable to employees who want to be autonomous. This is once again supported by Keerthana and Madhumitha (2025) who indicate that flexibility is the determinant of attracting gig workers. Their factual evidence conforms with H3 because they argued that flexibility is a characteristic feature of gig jobs. H3 is also supported by the fact disclosed by Antloga & Huđek (2024) that the perception of the flexibility of gig work was common among different demographics.

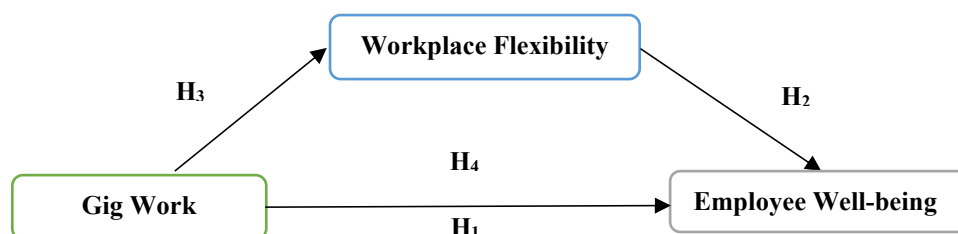
Harun et al. (2020) explain how the gig work can prosper, as the feature of flexibility via digital platforms ensures its success, demonstrating once again that the concept of the gig work is intertwined with flexibility. H3 is also supported by Shakil (2024) who presents the advantages of flexibility as a structural feature of gig work in Malaysia that allows one to earn multiple income streams as well as freedom of time.

*H3: A positive relationship exists between gig works and workplace flexibility.*

As Shahzad (2025) points out, autonomy and flexible working schedules are among the reasons immigrants working in the IT sphere in Finland enjoy meaningful work experiences. This indicates a mediating role of flexibility along the connection between working in gigs and well-being, which proves H4. Syarifudin (2024) explains the two-sided characteristic of the flexible work in the gig economy. Although being flexible can improve the work-life balance, it can also eliminate the boundaries and cause stress. These results indicate a multifaceted mediating nature of flexibility, backing H4 by the fact that flexibility is one of the fundamentally important mechanisms connecting gig work to well-being, either positively or negatively. Wulandari & Alifah (2025) discuss the rights of the urban gig workers, stating that the flexibility as the essential part of the gig work has to have its regulations in order not to be abused. It follows, consistent with H4, they found that policy frameworks matter in how flexibility moderates the gig work—well-being relation.

*H4: The Flexibility at work mediates the relationship between the gig work as well as employee well-being.*

The literature supports the view that, gig work can facilitate well-being by providing more autonomy (H1), which is complemented by the flexibility it enables to workers (H2). Additionally, this flexibility is one of the hallmarks of gig work (H3) and it might mediate the association of gig work with well-being (H4). Further examination of these hypotheses will be able to clarify the dynamics of well-being within the specific situation of gig employment.



**Fig 1 Research Model**

## Methodology

### Research Design

In conducting this research, researcher adopted a quantitative, cross-sectional research design to determine the association between gig work and flexibility of work and the well-being of employees. The quantitative design was adopted due to the necessity to test certain hypotheses by finding empirical data in a structured form and being allowed to perform statistical research and investigate the correlation of variables. Semi-longitudinal design was not used as it would require extended monitoring of the gig workers over some time period to determine the development of their experiences across job types and accordingly, we will instead use a cross-sectional approach, as it allows to receive the data at one point in time about a very big group of the gig workers and provide the picture of their current experiences across the job type. The research study was also laid on the foundations of deductive reasoning whereby the researchers started with proposed theories namely Job Demands Resources (JD-R) model and Self-Determination theory (SDT) and raised their hypotheses based on the theories. This method is suitable in the verification of theoretical framework and the study of the mediation effect among a specific population. The survey was the main method of data collection because it proved effective in collecting standardized standard responses of the participants, who would be geographically widespread. The approach was especially appropriate because of the virtual or mobile nature of gig work. The structured questionnaire included validated scales measuring



gig work intensity, workplace flexibility, and employee well-being, ensuring reliability and validity of the constructs.

Moreover, the research design allowed for mediation analysis, which is essential for testing the indirect effect of gig work on well-being through workplace flexibility. To strengthen the analysis, statistical techniques such as multiple regression and bootstrapping procedures (via the PROCESS macro in SPSS) were applied.

The quantitative cross-sectional design provided a robust framework for answering the research questions and testing the proposed hypotheses, offering both generalizable insights and theoretical contributions to the study of flexible work and employee well-being in the gig economy.

### **Population and Sample**

A total of 346 gig workers were sampled. The unit of analysis in the current study is the employees involved in the freelancing jobs in the different IT firms in Peshawar. The current study studied the effect of gig work on the employee productivity and wellbeing as unit of analysis.

### **Instruments and Measures**

To ensure the validity and reliability of the findings, this study utilized standardized and well-established instruments to measure the three core constructs: gig work, workplace flexibility, and employee well-being. All the scales were chosen depending on their applicability, psychometric strength and previous use in the context of similar study.

#### **1. Gig Work Scale**

The degree and types of gig work were gauged with a version of the Gig Work Involvement Scale devised based on the items used in existing empirical research on contingent and non-standard work (Kost, Fieseler, & Wong, 2020; Spreitzer et al., 2017). The measurement had the following items:

- “I choose when and how much I work.”
- “I work independently without a formal supervisor.”
- “My work is typically short-term or project-based.”

Respondents rated their agreement with each item on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The scale was intended to measure the aspects like autonomy, task variability, and work based on the project typical of the gig employment. Cronbach alpha, which is the measure of internal reliability of the scale, was larger than 0.80, reporting high reliability.

### **2. Workplace Flexibility Scale**

The level of workplace flexibility was evaluated based on the modification of the scale presented by Hill et al. (2008) and further improved in the works by Allen et al. (2013). The scale involved such main points of flexibility as:

- Temporal flexibility (e.g., choice over work hours and scheduling),
- Locational flexibility (e.g., ability to work from various locations), and
- Decision-making autonomy (e.g., control over how tasks are completed).

Sample items included:

- “I have the flexibility to decide when I start and end my workday.”
- “I can work from a location of my choice.”
- “I am free to determine how to accomplish my job tasks.”

Items were rated on a 5-point Likert scale (1 = Not at all true; 5 = Completely true). The scale has been proven to be multidimensional in strengths within the studies of flexible work arrangements and affirmed Cronbach alpha of 0.87 within the current study.

### **3. WHO-5 Well-being Index**

In order to assess subjective well-being, the research used the World Health Organization Five Well-being Index (WHO-5), a world-popular, short version scale that is applied to assess not only clinical but also occupational conditions (WHO, 1998). The WHO-5 evaluates how often a person feels good mood, vitality, and interest in general activities during a period of two weeks back. Examples of items are:

- “I have felt cheerful and in good spirits.”

- “I have felt calm and relaxed.”
- “I woke up feeling fresh and rested.”

Participants responded using a 6-point Likert scale ranging from 0 (At no time) to 5 (All of the time). There is a total score, the score is believed to be between 0-25 and the higher the well-being. The WHO-5 has demonstrated excellent internal consistency and convergent validity across multiple populations. In this study, the Cronbach's alpha was 0.89, affirming its reliability.

By using validated and widely accepted scales, the study ensures the credibility of its measurements and allows for meaningful comparisons with existing literature in the fields of organizational behavior and occupational health.

#### **Data Collection Process**

As discussed in the study nature, the study was based on primary data. Therefore, the study adapted closed ended questionnaire from the literature and then used for the data collection. The KP IT Board and Pakistan Freelancers Association organized different events in which these freelancers participate. The researcher visited the freelancers in the selected company working in Peshawar to collect the data. The questionnaire were given to them and then collected back after filled by respondents. The purpose of discussion with them is to clear all the misunderstanding face by them in the reading of questionnaire.

#### **Data Analysis Techniques**

To examine the relationships among gig work, workplace flexibility, and employee well-being, the study employed a series of quantitative data analysis techniques using IBM SPSS (Statistical Package for the Social Sciences), including the PROCESS macro developed by Andrew F. Hayes for testing mediation models. These analytical procedures ensured rigorous examination of the research hypotheses and research questions.

### **1. Descriptive Statistics**

Descriptive statistics were used to summarize the key characteristics of the data set, including the demographic profile of the participants (e.g., age, gender, gig work type) and the central tendencies (mean, median) and dispersion (standard deviation, range) of the primary variables: gig work, workplace flexibility, and employee well-being. These statistics provided an overview of the sample composition and allowed for the identification of any potential data anomalies or outliers.

### **2. Correlation and Regression Analysis**

Pearson correlation coefficients were calculated to assess the strength and direction of the bivariate relationships between the core variables. This preliminary step helped determine whether significant linear associations existed among gig work, flexibility, and well-being.

Following this, multiple linear regression analysis was conducted to test the direct effects of independent and mediator variables on the dependent variable. Specifically:

- The effect of gig work on employee well-being (to test H1).
- The effect of workplace flexibility on employee well-being (to test H2).
- The relationship between gig work and workplace flexibility (to test H3).

Regression analysis also helped control for possible confounding variables such as age, gender, and type of gig work.

### **3. Mediation Analysis using PROCESS Macro**

To test H4, which posited that workplace flexibility mediates the relationship between gig work and employee well-being, the PROCESS macro (Model 4) was used. This tool allows for robust estimation of indirect effects in mediation models using bootstrapping methods.

- Bootstrapping (5,000 resamples) was used to generate bias-corrected confidence intervals for the indirect effect.
- Mediation was considered statistically significant if the confidence interval did not contain zero.

This approach is particularly well-suited for small-to-moderate samples and does not assume the normality of the sampling distribution of the indirect effect.

## Results

### Descriptive Statistics

The data for this study were collected from a total of 346 gig workers, and the descriptive statistics reveal meaningful patterns across various demographic and study variables. The sample was predominantly male (92%), with female respondents comprising only 8%, indicating a gender imbalance in the data collection process. A majority of the respondents (55%) were aged 21 to 25 years, followed by 39% aged above 26 years, and 6% below 20 years, reflecting a young, working-age sample. The highest proportion of respondents (51%) held a Bachelor's degree, 35% had lower than a Bachelor's, and only 14% had Master's or higher qualifications, suggesting moderate to high educational attainment among participants. In terms of experience, 40% of participants had 1 year or less, 34% had 2 to 5 years, and 25% had more than 6 years, indicating a relatively new and emerging workforce in the gig sector.

**Table 1:** *Descriptive Statistics of Demographic Variables*

Variable	Sub-category	Frequency (n)	Percentage (%)
Gender	Male	318	92%
	Female	28	8%
Age Group	Below 20 Years	22	6%
	21 to 25 Years	189	55%
	Above 26 Years	135	39%
Qualification	Lower than Bachelor	122	35%
	Bachelor	176	51%
	Master or Above	48	14%
Experience	1 Year or Less	139	40%



2 to 5 Years	119	34%
Above 6 Years	88	25%

### Descriptive Statistics of Study Variables

Across the three main variables measured, respondents reported relatively high mean scores (all above 4.0), indicating general agreement or positive perceptions toward their gig work experiences. Workplace Flexibility had the lowest ( $M = 4.15$ ), though still notably high. Standard deviations were moderate, suggesting some variability in responses, while skewness values were negative, indicating a slight leaning toward higher scores.

**Table 2: Descriptive Statistics of study Variables**

Variable	Likert Scale	(n)	Mean	Min	Max	Std. Dev.	Skewness	Kurtosis
Gig Work	1–5	346	4.31	2	5	0.728	-0.513	-0.61
Employee Well-being	1–5	346	4.20	1	5	0.674	-0.433	-0.26
Workplace Flexibility	1–5	346	4.15	2	5	0.697	-0.815	-0.66

### Reliability Statistics

**Table 3: Reliability Statistics of the Study Variables**

Variable	CA	CR	AVE
Employee Wellbeing	0.970	0.973	0.664
Gig Work	0.919	0.943	0.804
Workplace Flexibility	0.956	0.962	0.680

CA= Cronbach's Alpha, CR= Composite Reliability, AVE= Average Variance Extracted;

Table 3 shows the findings of reliability statistics. The current study has used different tests for the assessment of reliability. For the internal consistency, the study has used cronbach alpha and composite reliability. The standard value for the composite reliability is 0.70 (Hair et al, 2019). The findings of CA

are more than 0.80 which shows that the composite reliability results were found reliable. The findings show that values of composite reliability are more than standard. The results for average variance extracted shows that all the values are more than .50.

### Correlation

**Table 4: Correlation**

	EW	GW	WF
Employee Wellbeing	1		
Gig Work	0.043	1	
Workplace Flexibility	0.428**	0.664**	1

### Hypotheses Testing

**Table 5: Regression**

Path	Coefficient (B)	LLCI	ULCI	R <sup>2</sup>	p-value
Gig Work → Employee Well-being	0.715	0.624	0.802	0.797	0.000
Gig Work → Workplace Flexibility	0.926	0.854	0.984	0.916	0.000
Workplace Flexibility → Employee Well-being	0.265	0.187	0.343	–	0.000

Notes:

LLCI: Lower Level Confidence Interval

ULCI: Upper Level Confidence Interval

R<sup>2</sup> is reported only for direct regressions where model fit was evaluated.

All p-values are significant at  $p < 0.05$ .

**Table 6 : Mediation Analysis (PROCESS Model 4)**

Path	Effect (B)	SE	LLCI	ULCI	p-value
Total Effect (Gig Work → Employee Well-being)	0.715	–	0.624	0.802	0.000
Direct Effect (controlling for mediator)	0.469	–	0.382	0.556	0.000
Indirect Effect (via Workplace Flexibility)	0.246	0.048	0.162	0.349	–
Gig Work → Workplace Flexibility (a-path)	0.926	–	0.854	0.984	0.000
Workplace Flexibility → Employee Well-being (b-path)	0.265	–	0.187	0.343	0.000

The indirect effect of gig work on employee well-being through workplace flexibility is statistically significant, as the 95% confidence interval (CI) does not include zero.

The direct effect remains significant even after accounting for workplace flexibility, indicating partial mediation.

This supports H4, confirming that workplace flexibility partially mediates the relationship between gig work and employee well-being.

### Discussion

The results of this study provide strong empirical support for the positive relationship between gig work and employee well-being. Specifically, the findings reveal that gig work is significantly associated with higher well-being, particularly when it allows workers greater autonomy, task control, and flexibility. The mediation analysis confirmed that workplace flexibility plays a pivotal role in this relationship. That is, gig work enhances flexibility, and this flexibility, in turn, contributes to greater well-being.

This suggests that it is not merely gig work itself, but rather the level of flexibility embedded in the gig work structure, that shapes how workers perceive their psychological and emotional wellness.

### **Theoretical Implications**

The results have been useful to the theoretical knowledge of non-traditional patterns in employment in the perspective of the Job Demands-Resources (JD-R) model and the Self-Determination Theory (SDT). Job resources that might be buffers to the negative impact of job demands and boost positive work outcomes (as presented by the JD-R model (Bakker & Demerouti, 2007)) include autonomy and flexibility. This paper attests to the reality that workplace flexibility is an important job resource, which cushions the impact of any job stressor and enhances the well-being of gig workers. As per Self-Determination Theory (Deci & Ryan, 2000), autonomy, competence and relatedness are vital factors in determining psychological health, the results of the study indicates that flexibility of work conditions as an instrument of autonomy is necessary to help the gig workers maintain mental well-being. So the paper applies JD-R and SDT theories to the developing phenomena of gig and platform work.

### **Practical Implications**

Practically, the findings point to several important issues, concerns of platform designers, HR practitioners, policymakers, who are engaged in regulating or managing the environment of the gig work. Because flexibility is one of the key mediators in this gig work-well-being interaction, it is important that gig platforms develop systems that would not restrict flexibility but strengthen it instead. A typical example is to leave the selection of work hours to the discretion of the worker, to refuse illogical assignments without a fine and to receive some freedom of choice in the workplace. In addition, policy makers ought to think of creating guidelines or rules that will support the idea of fair labor standards, but will at the same time not compromise on the independent forms that the gig work takes. Training, digital literacy,

wellness programmes or legal protection can also support workers, further boosting the quality of the working experience and helping to counteract the risks that precarious employment is usually linked to.

### **Conclusion**

This paper is a powerful indication that the contribution of gig work to the well-being of employees is undeniably constructive, especially when flexibility in the workplace is factored in. The findings provide a clue that it is not a point of constituting gig type of work but it is the level of control and autonomy the working conditions derive on defining the well-being. Flexibility at a workplace came out as a vehicle through which the advantages of gig work have been actualized and thus it corroborates that flexibility is both a job resource and a means of enabling psychological well-being. In addition to this, the findings indicate significant differences between perceived flexibility among various categories of gig workers, with freelancers stating the highest rates and ride-share drivers the lowest. It shows the importance of considering a gig work as a diverse form of employment in which the work experience and the employment outcome relies on the nature and design of the gig establishment. To sum it up, the research highlights the necessity to make flexibility within gig work codices a strategic priority. Platform developers, employers, and policymakers should focus on designing work environments that prioritize autonomy, decision-making control, and adaptable schedules. Doing so will not only support the well-being of gig workers, but also promote sustainable engagement and performance in the growing gig economy.

### **Limitations and Future Research**

While the findings of this study offer valuable insights into the relationship between gig work, workplace flexibility, and employee well-being, several limitations must be acknowledged.

Firstly, the use of a cross-sectional research design restricts the ability to draw causal inferences. Although statistically significant associations were found,



the directionality of the relationships cannot be definitively established. Future research employing longitudinal or experimental designs would allow for stronger causal conclusions and a deeper understanding of how these relationships evolve over time.

Secondly, the study relied entirely on self-reported data, which may be subject to response bias, including social desirability and recall errors. Incorporating multi-source data—such as supervisor evaluations, behavioral analytics, or objective performance measures—could enhance the robustness of future studies.

Lastly, the generalizability of the results may be limited due to a relatively homogeneous sample drawn from a single cultural and economic context. As gig work varies significantly across regions and industries, future research should explore sectoral and cultural differences in how workplace flexibility influences well-being. Comparative studies across countries or gig platforms (e.g., freelance marketplaces vs. ride-share apps) could offer richer, more nuanced insights.

In sum, addressing these limitations in future studies will strengthen the theoretical foundations and practical applications of research on gig work and employee well-being in diverse contexts.

## **References**

- Bajwa, U., Gastaldo, D., Ruggiero, E., & Knorr, L. (2018). The health of workers in the global gig economy. *Globalization and Health*, 14(1). <https://doi.org/10.1186/s12992-018-0444-8>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands–Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakr, R., Jarrar, M., Abumadini, M., Sultan, A., & Larbi, E. (2019). Effect of leadership support, work conditions and job security on job satisfaction in a medical college. *Saudi Journal of Medicine and Medical Sciences*, 7(2), 100-105. [https://doi.org/10.4103/sjmms.sjmms\\_105\\_17](https://doi.org/10.4103/sjmms.sjmms_105_17)

- Barrios, J., Hochberg, Y., & Yi, H. (2020). Launching with a parachute: the gig economy and entrepreneurial entry. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3557279>
- Chang, P., Rui, H., & Wu, T. (2021). Job autonomy and career commitment: a moderated mediation model of job crafting and sense of calling. Sage Open, 11(1). <https://doi.org/10.1177/21582440211004167>
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Springer.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01)
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands–Resources model of burnout. Journal of Applied Psychology, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Duhaime, E. and Woessner, Z. (2019). Explaining the decline of tipping norms in the gig economy. Journal of Managerial Psychology, 34(4), 233-245. <https://doi.org/10.1108/jmp-06-2018-0270>
- Gaidampas, S. (2025). The gig economy: an emerging paradigm in the labor market., 214-217. <https://doi.org/10.53486/sstc2024.v2.50>
- Giang, T., Dung, L., Tien, H., & Nhu, C. (2024). Corporate social responsibility and gig worker commitment: empowerment and trust as mediators. Journal of Global Responsibility. <https://doi.org/10.1108/jgr-12-2023-0199>
- Gori, A. and Topino, E. (2020). Predisposition to change is linked to job satisfaction: assessing the mediation roles of workplace relation civility and insight. International Journal of Environmental Research and Public Health, 17(6), 2141. <https://doi.org/10.3390/ijerph17062141>

- Haiqing, W., Danli, C., Chen, T., & Weilin, S. (2022). Influence of job security on intertemporal choice under home isolation in the epidemic closure. *International Journal of Frontiers in Sociology*, 4(12). <https://doi.org/10.25236/ijfs.2022.041210>
- Haque, F. and Dard, A. (2023). New face of job quality challenge in india: gig worker studies. *Journal of Indonesian Applied Economics*, 11(1), 101-109. <https://doi.org/10.21776/ub.jiae.2017.011.01.8>
- He, X., Lu, W., Luo, H., & Liu, S. (2021). How gig worker responds to negative customer treatment: the effects of work meaningfulness and traits of psychological resilience. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.783372>
- Healy, J., Pekarek, A., & Vromen, A. (2020). Sceptics or supporters? consumers' views of work in the gig economy. *New Technology Work and Employment*, 35(1), 1-19. <https://doi.org/10.1111/ntwe.12157>
- Hu, K. and Fu, F. (2021). Evolutionary dynamics of gig economy labor strategies under technology, policy and market influence.. <https://doi.org/10.48550/arxiv.2103.13234>
- Huang, X., Sun, Z., Li, J., & Li, J. (2024). Will fun and care prevent gig workers' withdrawal? a moderated mediation model. *Asia Pacific Journal of Human Resources*, 62(4). <https://doi.org/10.1111/1744-7941.12425>
- Jain, V. and Rani, A. (2024). Labor market trends in the gig economy: implications for workers and employers. *International Journal for Research Publication and Seminars*, 15(2), 50-54. <https://doi.org/10.36676/jrps.v15.i2.08>
- Joo, B. and Shawl, S. (2021). Covid-19 pandemic and the rising gig economy: an emerging perspective. *Global Economics Science*, 16-23. <https://doi.org/10.37256/ges.232021917>
- Keith, M., Harms, P., & Tay, L. (2019). Mechanical turk and the gig economy: exploring differences between gig workers. *Journal of Managerial*

- Psychology, 34(4), 286-306. <https://doi.org/10.1108/jmp-06-2018-0228>
- Koutsimpogiorgos, N., Slageren, J., Herrmann, A., & Frenken, K. (2020). Conceptualizing the gig economy and its regulatory problems.. <https://doi.org/10.31235/osf.io/jmqyt>
- Lakshmanan, S. (2025). A crucial analysis of the gig economy and how it's reshaping the regular workforce. *Interantional Journal of Scientific Research in Engineering and Management*, 09(04), 1-9. <https://doi.org/10.55041/ijsrem45620>
- Leitão, J., Pereira, D., & Gonçalves, Â. (2019). Quality of work life and organizational performance: workers' feelings of contributing, or not, to the organization's productivity. *International Journal of Environmental Research and Public Health*, 16(20), 3803. <https://doi.org/10.3390/ijerph16203803>
- Li, Y., Xu, S., Yu, Y., & Meadows, R. (2022). The well-being of gig workers in the sharing economy during covid-19. *International Journal of Contemporary Hospitality Management*, 35(4), 1470-1489. <https://doi.org/10.1108/ijchm-01-2022-0064>
- Marquis, L., Kim, S., Alahmad, R., Pierce, C., & Robert, L. (2018). Impacts of perceived behavior control and emotional labor on gig workers., 241-244. <https://doi.org/10.1145/3272973.3274065>
- Ncamane, N. (2023). Digital platform workers and the conundrum of the definition of an 'employee' in the era of the fourth industrial revolution. *South African Mercantile Law Journal*, 35(1), 1-26. <https://doi.org/10.47348/samlj/v35/i1a1>
- Nunes, P., Proença, T., & Todaro, M. (2024). Adaptation and validation of self-report job precariousness scale for brazilian gig work context. *Revista De Administração De Empresas*, 64(5). <https://doi.org/10.1590/s0034-759020240502>

- Palhad, S., Onwubu, S., Singh, R., Thakur, R., Thakur, S., & Mkhize, G. (2023). The benefits and challenges of the gig economy: perspective of gig workers and small medium and micro enterprises (smmes) in south africa. *African Journal of Inter/Multidisciplinary Studies*, 5(1), 1-12. <https://doi.org/10.51415/ajims.v5i1.1051>
- Peetz, D. (2023). Can and how should the gig worker loophole be closed?. *The Economic and Labour Relations Review*, 34(4), 840-854. <https://doi.org/10.1017/elr.2023.57>
- Ruyter, A. and Brown, M. (2019). The gig economy.. <https://doi.org/10.1017/9781788210065>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Shanshan, Z. and Liu, Y. (2024). Job demands-resources on digital gig platforms and counterproductive work behavior. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1378247>
- Soraya, A. and Ardiyanti, N. (2024). Navigating digital transformation: the roles of resilience, job security, and social support in shaping turnover intention among indonesian architects. *Community Medicine and Education Journal*, 6(1), 739-751. <https://doi.org/10.37275/cmej.v6i1.660>
- Svetek, M. (2020). The promise of flexicurity: can employment and income security mitigate the negative effects of job insecurity?. *Economic and Industrial Democracy*, 43(3), 1206-1235. <https://doi.org/10.1177/0143831x20975474>
- Talukder, M., Khan, M., & Kumar, S. (2025). The impact of gig economy trends on traditional employment models., 253-276. <https://doi.org/10.4018/979-8-3693-4369-2.ch016>



- Thomas, S. and Baddipudi, V. (2022). Changing nature of work and employment in the gig economy: the role of culture building and leadership in sustaining commitment and job satisfaction. *NHRD Network Journal*, 15(1), 100-113.  
<https://doi.org/10.1177/26314541211064735>
- Tkachenko, V., Puntus, D., Yakovleva, G., & Yaroshenko, O. (2024). Models of social protection for workers in the gig economy: legal challenges and prospects. *SoL*, 2024(3), 1-7. <https://doi.org/10.55284/sol.v2024i3.139>
- Trí, C. and Pham, A. (2024). Generation differences in the gig economy in vietnam. *Ho Chi Minh City Open University Journal of Science - Economics and Business Administration*, 14(3), 59-76.  
<https://doi.org/10.46223/hcmcoujs.econ.en.14.3.2730.2024>
- Waldkirch, M., Bucher, E., Schou, P., & Grünwald, E. (2021). Controlled by the algorithm, coached by the crowd – how hr activities take shape on digital work platforms in the gig economy. *The International Journal of Human Resource Management*, 32(12), 2643-2682.  
<https://doi.org/10.1080/09585192.2021.1914129>
- Wan, Z., Zhang, L., Li, Z., & Zhang, F. (2024). Navigating autonomy: unraveling the dual influence of job autonomy on workplace well-being in the gig economy. *Frontiers in Psychology*, 15.  
<https://doi.org/10.3389/fpsyg.2024.1369495>
- Wang, S., Li, L., & Coutts, A. (2022). National survey of mental health and life satisfaction of gig workers: the role of loneliness and financial precarity. *BMJ Open*, 12(12), e066389. <https://doi.org/10.1136/bmjopen-2022-066389>
- Woon, L., Sze, C., Ying, C., & Yusof, A. (2022). Impact of jd-r model on psychological well-being of gig workers., 12-20.  
[https://doi.org/10.2991/978-2-494069-21-3\\_3](https://doi.org/10.2991/978-2-494069-21-3_3)
- Wu, J. and Zhou, J. (2022). Basic psychological need satisfaction and well-being for gig workers: a fuzzy set qca approach in didi of china. *Current*

Psychology, 42(32), 28820-28832. <https://doi.org/10.1007/s12144-022-03953-8>

Yuanto, C., Ratnasih, C., Sugiyanto, S., & Yuanita, T. (2022). Employee satisfaction as an intervening variable: determinants of the effect of job security and employee engagement on employee performance. <https://doi.org/10.4108/eai.16-4-2022.2319757>

Yusof, N., Ismail, N., Rashid, A., Khan, H., & Yusof, M. (2024). The the impact of task management, social support and income on work-life balance among gig workers. Information Management and Business Review, 16(3(I)S), 950-957. [https://doi.org/10.22610/imbr.v16i3\(i\)s.3944](https://doi.org/10.22610/imbr.v16i3(i)s.3944)