Enhancing Financial Well-being of Gig Workers through Digital Finance

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Based on the theory of capability, this study aims to explore direct-indirect effects of Digital Financial Literacy (DFL) and Digital Financial Inclusion (DFI) on Financial Well-Being (FWB) through Digital Financial Capability (DFC) along with the moderating effect of Grit. Employing a sample of 296 gig workers on PLS-SEM, findings supported all the hypothesis confirming that literacy and inclusion in digital finance can improve FWB through development of DFC, where grit can further amplify the positive effects DFC. The study validates a model of digital finance based FWB of gig workers, providing policy implications and support mechanisms.

Keywords: Digital Financial Literacy, Digital Financial Inclusion, Digital Financial Capability, Financial Well-being, Gig Workers

1. Introduction

Technological advancements are rapidly transforming the financial landscape, reshaping how services are delivered and consumed (Guo et al., 2023). New digital financial services and products have emerged and expanded rapidly (Meng, 2023), ushering in various opportunities and challenges (Panos & Wilson, 2020). Furthermore, this digital transformation is causing disruptive changes in the financial sector, rapidly making existing knowledge obsolete (Arnaut & Bećirović, 2023), hence, intensifying the need for a different set of financial skills and knowledge to adapt to the changing digital economy (Kamble et al., 2023). In response to this, there is a growing need for individuals to develop a set of capabilities that can enable them to leverage the benefits of digital finance while mitigating the associated risks. This has led to the emergence of the concept of Digital Financial Capability (DFC), defined as "capability to use digital financial products and services" (Luo et al., 2021). Based on this definition, Wang (2024) and Aristei et al (2024) analysed the impact of DFC on entrepreneurship and investment decision respectively. Further, Meng (2023) developed an index of DFC embracing basic knowledge and skills, awareness, attitude, behaviour, and self-protection. Although few attempts have been made to conceptualize DFC but the concept is still emerging due to its multifaceted nature. There is a need to study DFC from a multidimensional perspective by exploring its antecedents and consequents for a holistic understanding.

Moreover, inclusion in digital finance has become a necessity for individuals to thrive in the current economy and live a quality life (Chinoda & Kapingura, 2024). The digital economy has also given rise to gig workers (Noskov & Kazy mov, 2024), individuals involved in temporary or project-based work, often lacking paid leave, job security, health insurance, and employment contracts(Wu & Huang, 2024). Traditional employment benefits are not provided to these workers which put their well-being at risk. Despite their significant contributions to economic development (Zvavahera et al., 2024), these workers remain financially vulnerable specially in developing economies(Arriagada et al., 2023). Exclusion of these workers from social security provisions raises concern about their happiness, health, and life satisfaction. Although economies have begun to recover from the shock of COVID-19 on a broader scale, the effects on vulnerable populations in low-income countries are expected to persist for the long term (Kamble et al., 2023). Being a growing segment of the workforce and a key driver of economic development, ensuring the well-being of these workers is essential for fostering their social as well as economical sustainability and resilience(Li et al., 2022; Mishra et al., 2024; Silva & NYOBE, 2023). The concept of Financial Well-Being (FWB) has received global attention all over the world(Bashir & Qureshi, 2023). However, this concept is relatively alien to DFC and Digital Financial Inclusion (DFI) with past literature majorly focusing on digital payments (Dzogbenuku et al., 2022) and digital financial literacy(Kumar et al., 2023). Improvement in FWB is known to have positive impact on happiness (Bhatia & Singh, 2023), job satisfaction(Aguilar-Ham et al., 2024), and overall well-being(Nykiforuk et al., 2023). Thus, prioritizing the FWB of workers amid recent economic fluctuations and digitalization is essential, making it necessary to study digital finance as a tool for fostering sustainable and resilient digital gig economy.

Researchers have further argued that achieving FWB requires individuals to have not only easy access to appropriate financial services but also the necessary knowledge to effectively use these services and achieve their financial goals(Hasan et al., 2021). Hence, with the digital transformation in finance, there is a need to rethink the traditional concept of financial capability brining in the digital perspective (Koskelainen et al., 2023) and analyze the how DFL and DFI influence it. As far as the conceptualization and measurement of DFC is concerned, few studies have provided divergent views. Thus, based on financial capability framework by Sherraden(2013), this research seeks to identify Digital Financial Literacy (DFL) and Digital Financial Inclusion (DFI) as antecedents of DFC and examine their direct and indirect impacts on FWB.

Additionally, psychological factors, such as grit, can amplify the outcomes of capabilities(Datu, 2021). Gritty individuals have a higher goal achieving ability as they can comparatively channelize their capabilities in a better way for achievement of goals(Schimschal et al., 2022; Tang et al., 2021). Although psychological factors have a key role in achievement of FWB (Bhatia & Singh, 2023), they do not seem to attract enough attention in existing research. Therefore, this research seeks to account the moderating effect of grit in the relationship between DFC and FWB.

This study addresses key gaps in the existing literature by advancing the understanding of DFC and exploring DFL and DFI as its antecedents, which previous research has largely overlooked. Furthermore, this research extends the financial capability framework by examining it from a digital perspective. Second, although there is broad agreement on direct positive impact of DFL on individuals' FWB(Choung et al., 2023; Mir, 2024), the extant literature lacks studies that investigate the impact of DFI and DFC on FWB. This study is one of the first few attempts to empirically investigate the influence of DFL and DFI both directly and indirectly through DFC on FWB. Third, while previous research has primarily examined grit in the contexts of motivation, education, and psychology, its financial implications remain underexplored. This study integrates grit into the analysis of DFC's impact, offering new insights into how grit influences the achievement of FWB.

The next section provides literature review, followed by methodology and data analysis. Further, discussion and implications are covered. The conclusion and limitations are presented in the last section.

2. Review of Literature

Theoretical Background

The conceptual framework theorized by Sherraden (2013)is used in this study. The Theory of Financial Capability suggests that FWB is a functional result of one's financial capacity comprising of two major components: "ability" and "opportunity" to act. Financial capability combines ability to act and opportunity to act under financial literacy and financial inclusion respectively, which results in a rational and confident financial decision making resulting in achievement of a sound FWB. Nussbaum applied capability theory to human development and welfare, considering not just the internal capabilities viz. ability, knowledge, skill but also the external conditions and opportunities available viz. access to products, services, and institutions (Nussbaum & Capabilities, 2011). She also suggested that combined capability is required to achieve well-being not just internal capabilities. Some external conditions must also exist for people so that they can be capable. These internal capabilities help in making use of external capabilities to pursue their goals. Hence, through financial literacy and financial inclusion an individual financial capability to manage finances is such a way that leads him towards improved FWB. Moving to the digital aspect, this study conceptualizes internal capabilities (ability to act) as DFL and external capabilities (opportunity to act) as DFI. Both of these serves as inputs enabling individuals to be capable enough to manage their personal finances through digital means. Combined capability i.e. DFC leads to FWB. It represents the practical application of DFL and DFI for some tangible outcomes in financial well-being through digital channel. This theory explains a framework for understanding and analysing individual's capabilities and how they lead to well-being. An organisation must ensure DFC of their employees as a fair compensation does not ensure FWB but being able to make right financial decision does. Hence, enhancement in DFC can improve the FWB of gig workers, thereby strengthening the organization's workforce.

The theory of grit (Duckworth et al., 2007) further suggests that individuals with high grit tends to be more passionate and persistent, experiencing greater success and well-being in various domains of life. FWB is often considered the ultimate goal for individuals, and those with higher levels of grit, characterized by passion, persistence, and sustained effort, may achieve it more efficiently due to their focused and resilient approach. Duckworth (2007) stated that, it is likely that a person's tendency to pursue goals with passion and perseverance may influence the outcomes derived by their capabilities. Thus, we can say that grit can moderate the effect of DFC on FWB.

Financial Well-being (FWB)

With a view to investigate various dimensions of financial well-being (FWB), the present study has reviewed a comprehensive literature review with respect to Indian and global context. FWB is a multi-dimensional, complex, and dynamic construct (Brüggen et al., 2017). According to Sabri et al. (2020) , an employee's FWB has a significant impact on his job performance, overall happiness, and satisfaction. Financial concerns have been known to reduce employee motivation and increase the chances of frequent job changes in an effort to earn best pay (Prakash et al., 2022). Through the mediating effect of employee happiness, FWB significantly increases employee productivity. (Bashir et al., 2024). Further, Parkash and Hawaldar (2024) examine that level of job of a person influences his FWB. To maximise the output from gig workers, it is essential for their employer to take care of their FWB as it has a known significant effect on their productivity (Bashir et al., 2024), motivation (Taft et al., 2013), happiness (Gerrans et al., 2014), and satisfaction (Obaid et al., 2023). Improved financial well-being transforms the lives of gig workers by providing financial security (Apriansah et al., 2022), enhancing quality of life (Karam et al., 2022), improving mental health (HASSAN et al., 2021), and economic growth (Voznyak et al., 2022). Hence, FWB becomes a crucial concern for gig workers as well as the employers.

However, the concept of FWB is still in its infancy, thus, in order to formulate and execute effective strategies, specifically in the context of developing nations like India, it is necessary to comprehend financial wellbeing from a multi-disciplinary and multi-dimensional perspective (Sehrawat et al., 2021). To overcome this limitation, there is a scope for future research to carry out demographic studies that vary in terms of income levels, lifestyles, consumption, and investment habits from those covered by the existing literature (Mahendru et al., 2022). There is a very scant literature on how digital finance influences FWB. Hence, this study is one of the few to investigate digital dimensions of FWB.

Digital Financial Literacy (DFL)

DFL is closely associated with the knowledge of using online systems of spending, saving, and investment using online payment/banking applications. DFL refers to problem-solving ability in new, digital enriched environment while being aware of risks in using the relevant service, and skill to protect oneself from frauds and scams (Aziz & Naima, 2021; Scandurra & Calero, 2020). DFL can also be understood as a union of financial literacy and digital platforms, where individuals apply their financial literacy in digital financial technology. With the advent of time, avoiding digital transactions has become a hassle for people as COVID-19 pandemic boosted the digital financial services, creating financial and digital disparities (Lyons & Kass-Hanna, 2021). DFL has become increasingly important in the modern era as financial management has been revolutionised by digital technologies. The digital revolution which is currently going on necessitates financial literacy to be defined in digital context.

DFL equips people with the knowledge and skills which are needed for effectively using digital financial service. As gig workers majorly operate outside the traditional employment structure along with lack of access to regular income streams and other benefits, DFL can significantly improve how they manage their money by making rational financial choices available digitally. Such financial choices will lead them on a path of financial stability and well-being. Having right digital financial skills, they can also improve their access to digital financial services which suits their needs. Navigating the digital environment with DFL puts them on a pathway to financial well-being where they can manage irregular income streams, plan for their future needs, and avoid digital frauds and scams. There exists only a few studies that examined the relationship between DFL and FWB (Choung et al., 2023; Kamble et al., 2023).

Further, DFL was found to have significant positive influence on women economic empowerment (Rahayu et al., 2023), financial capability (Kumar et al., 2023), and financial behaviour (Nurkholik, 2024). These are the factors which can further improve the FWB of an individual. Setiawan et al (2022) explored how DFL affects spending and saving using two round delphi process and found a positive influence.

Past studies have not explicitly explored the influence of DFL on DFC (Uthaileang & Kiattisin, 2023). Currently, the evidence is not comprehensive as to how DFL influences FWB indirectly. Hence, there is a need to examine this relationship for comprehensive understanding of the concept. Based on this body of literature, following hypothesis are proposed:

H1: Digital Financial Literacy is positively related to Digital Financial Capability.

H2: Digital Financial Literacy is positively related to Financial Well-being.

Digital Financial Inclusion (DFI)

DFI has become a key area of research in advancing access to formal financial service. DFI may also be one of the major factors influencing DFC. DFI refers to provision of digital formal financial services by fintech companies and traditional financial institutions to all the sectors of society at an affordable cost sustainably (Ding & Kang, 2023). DFI has potential to improve individual's financial situation and lead to sustainable growth (Ahmad et al., 2021; Liu et al., 2021; Tay et al., 2022). DFI has even a more growing role as there is a big risk of digital divide which may lead to financial exclusion (Khera et al., 2022). Hence, it is imperative that DFI must be ensured to promote economic growth of vulnerable groups. Gig workers needs DFI, so that they can access affordable and sustainable digital financial services which enable them to apply their DFL to make such financial choices that help them in achieving FWB. By providing gig workers with access to essential financial services, DFI helps them manage their finances more effectively, save for future needs, and mitigate financial risks. This inclusion leads to greater financial stability and resilience, which are key components of overall well-being. Both financial inclusion and financial literacy have to work individually as well as in synergy to make an individual financially capable to make decisions for better financial well-being (Sherraden, 2013). Thus, we have following hypothesis

H3: Digital Financial Inclusion is positively related to Digital Financial Capability.

H4: Digital Financial Inclusion is positively related to Financial Well-being.

Digital Financial Capability (DFC)

Financial capability is a multidimensional construct comprising individual's literacy, and accessibility to formal financial service es. It is the focus of researchers and policymakers rather than financial literacy (Parvathy & Kumar, 2022; Xiao et al., 2022) as it is a broader concept encompassing ability to effectively execute financial tasks. It accounts "Ability to act" as well as "opportunity to act" which leads to enhancement of FWB (Goyal & Kumar, 2021; Sherraden, 2013). However, with the digital age, the scope of financial capability needs to be extended to Digital Financial Capability. The traditional concept of financial capability revolves around financial literacy and financial inclusion (Sherraden, 2013). There is a noticeable growth in digitalization of formal financial services, which necessitates the DFI otherwise they will encounter problems of accessibility and useability of digital financial services (Morgan et al., 2019). Financial capability has a significant role through which FWB is achieved(Collins & Urban, 2018; Goyal & Kumar, 2021; Guo & Huang, 2023; Parvathy & Kumar, 2022; RASHID et al., 2022; Sabri & Anthony, 2019). Since there is very scant literature on how DFC impacts FWB, it is essential to further explore how this dimension of financial capability influences FWB. The integration of digital finance is essential for gig workers as it enhances accessibility to financial services, streamlines financial management, and empowers them to make informed financial decisions, ultimately improving their financial stability and quality of life.

Further, the rise of the gig economy has led to large number of people taking on temporary contracts and working independently, which puts them in position to personally manage their money in pursuit of FWB. Financial Well-being is significantly affected by the financial choices an individual makes. Enhanced DFC can help gig workers in improving their

FWB. Meng (2023) has demonstrated that digital financial management skills can improve the FWB, further emphasizing the growing need for DFC. Hence, Digital Financial Literacy and Digital Financial Inclusion must be taken into account for conceptualizing DFC.

While there is a substantial research on digital financial literacy (Choung et al., 2023; Lyons & Kass-Hanna, 2021; Morgan et al., 2019; Xiao et al., 2022), the concept of digital financial capability remains underexplored. Only few studies have explored digital financial capability with entrepreneurial performance (Luo et al., 2021) and household entrepreneurship (Luo & Zeng, 2020). This gap highlights the need for further research to understand the multidimensional aspects of DFC and its impact on different populations, particularly gig workers.

Hence, there is no widely accepted definition of DFC in the literature as of yet. This research thus aims to define DFC and its determinants. By integrating digital financial literacy (DFL) and digital financial inclusion (DFI), DFC provides gig workers with the necessary tools to navigate financial challenges and improve their financial stability. Further research is essential to fully understand DFC's impact and develop strategies to enhance it, thereby fostering a more inclusive and resilient financial ecosystem.

H5: Digital Financial Capability is positively related to Financial Well-being

H6: Digital Financial Capability mediates the relationship between Digital Financial Literacy and Financial Well-being.

H7: Digital Financial Capability mediates the relationship between Digital Financial Inclusion and Financial Well-being.

Grit

Grit is emerging as a significant factor in individuals' pursuit of success and well-being and potentially contributes to an individual's capabilities (Lin et al., 2023). Grit is conceptualized as a two-dimensional construct comprising perseverance of effort and consistency of interest (Duckworth & Quinn, 2009). Perseverance of effort refers to the sustain effort and hard work towards a goal despite of obstacles and setbacks. Consistency of interest is related to maintaining a stable interest in long-term goals over an extended period of time. Financial well-being is one such goal where both perseverance and consistency is needed. While grit has majorly been studied in academic and professional setting, its implications on financial well-being are still unknown. Gritty individuals are more likely to persist in their financial goals despite setbacks, such as unexpected expenses or income fluctuations (Datu, 2021). The interplay between grit and DFC in shaping FWB has not been focused much in the literature. Individuals with higher levels of grit may exhibit greater resilience, determination, and persistence in their financial pursuits, even in the face of obstacles or setbacks. This may amplify the positive influence of DFC on FWB. It opposes negative influences of setbacks and obstacles (Alhadabi & Karpinski, 2020).

H8: Grit moderates the relationship between Digital Financial Capability and Financial Well-being.

Proposed Conceptual Framework

This is the proposed conceptual framework of this study.

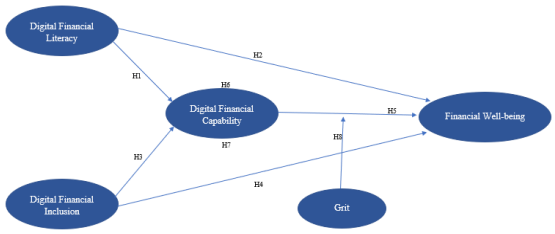

Figure 1 *Conceptual Framework*

3. Methodology

Sampling and data collection

The study focuses on Gig workers, defined as individuals working on temporary or contract basis, lacking regular job contract and security. For collecting a representative sample from the target population, this study utilizes snowball sampling technique. A self-administered questionnaire of items on DFL, DFI, DFC, grit, and FWB was used to collect data.

387 questionnaires were distributed to gig worker in India. 340 responses were received, of which 44 were excluded due to incompleteness, leaving 296 final responses. According to G*Power, a statistical software tool, a minimum of 94 responses is required to achieve 95% statistical power for conducting a Partial Least Squares-Structural Equation Modelling (PLS-SEM) analysis (Faul et al., 2009). This confirms that the sample size used in the study is sufficient.

Questionnaire and Measure

The items used to measure the constructs have been adopted and adapted from past studies in the areas of financial literacy, financial inclusion, financial capability, grit, and financial well-being.

Based on these five constructs, a questionnaire was framed. All responses are measured on five-point Liker scale ranging from "strongly disagree" to "strongly agree". For measuring DFL, scale of Morgan (2019) was adopted. Scales of Sarma

(2008) and Tahir (2021) were adapted to digital perspective to measure DFI and DFC. Measures provided by Duckworth and Quinn (2009) was used for quantifying grit. FWB was measured by the statements provided by CFPB (2018).
Face validity and content validity of the questionnaire were evaluated during the pilot study, which initially had 27 items measuring five constructs. The face validity and content validity of the questionnaire were assessed through feedback obtained from research experts, personal finance specialists, and psychometric professionals. They provided evaluations on the questionnaire's organization, content relevance, wording clarity, sentence structure, and overall layout. After the qualitative check, empirical testing of the questionnaire was conducted by drawing out a sample of 55 respondents for the population. Applying the confirmatory analysis, 19 items for five constructs were validated.

Analytical Approach
To analyse the data gathered for this study, Partial Least Square- Structural Equation Modelling (PLS-SEM) was utilized. The proposed conceptual model was analysed for reliability and validity, ensuring that the constructs met the required standards. The structural model was assessed through path coefficients and bootstrapping analysis, evaluating the relationships.

4. Data Specification

For the present study, Structural Equation Modelling was applied using Smart PLS 4.1.0.0. To evaluate and interpret the data, a two-stage approach consisting assessment of measurement model along with structural model was used.

Measurement Model Assessment
The proposed conceptual model was analysed for reliability and validity. Construct loadings, Cronbach' alpha, and composite reliability (CR), signifies reliability of the data.

The value of construct loadings, Cronbach's alpha, and CR must meet the required thresholds of 0.7, 0.7 and 0.5 respectively for the construct to be considered as reliable (Hair Jr et al., 2014). As shown in table 1, every construct meets the criteria and all the items demonstrate significantly higher loadings and Cronbach's alpha, thus confirming the fact that items and constructs are reliable. In order to verify the validity of the model, convergent and discriminant validity are also examined (Hair et al., 2013). For convergent validity of the construct is analysed by average variance extracted (AVE). As demonstrated in table 1, AVE is complying with the threshold limit of 0.5. Hence, as per the outcomes of construct loading, Cronbach's alpha, CR and AVE, it is resolved that there are no reliability and convergent validity issues in the model (see Figure 2)

Table 1 *Reliability and Validity of Constructs*

Construct	Items	Construct Loadings	Cronbach's Alpha	CR	AVE
DFC	DFC1	0.788	0.855	0.855	0.596
	DFC2	0.742			
	DFC3	0.844			
	DFC4	0.707			
DFI	DFI1	0.751	0.804	0.804	0.578
	DFI2	0.769			
	DFI3	0.761			
DFL	DFL1	0.751	0.874	0.875	0.584
	DFL2	0.793			
	DFL3	0.715			
	DFL4	0.827			
	DFL5	0.728			
FWB	FWB1	0.801	0.842	0.842	0.640
	FWB2	0.808			
	FWB3	0.791			
Grit	GRIT1	0.776	0.851	0.851	0.589
	GRIT2	0.826			
	GRIT3	0.741			
	GRIT4	0.723			
Notes(s): Significance level: Construct Loadings>0.7, Cronbach's Alpha>0.7, CR>0.7, AVE>0.5					

In addition, the heterotrait-monotrait ratio (HTMT) was employed to assess discriminant validity. Discriminant validity determines whether constructs are highly correlated among them or not. According to Henseler et al. (2015), an HTMT ratio of correlations must be less than 0.9 since it indicates the distinction between the two constructs. Table 2 demonstrates that HTMT values are less than the required threshold of 0.9. Hence, it can be confirmed that problem of discriminant validity does not exist in the current research.

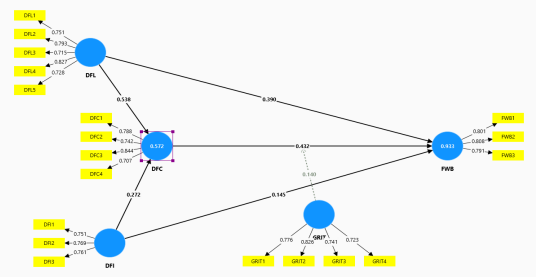

Figure 2 *Measurement Model*

Along with reliability and validity, it is important to examine collinearity measurement (Variance Inflation Factor) of the constructs. Statistical significance of an independent variable is undermined due to the problem of multicollinearity. VIF is recommended to be less than 5 and if it exceeds 5, it is regarded as a case of multicollinearity (Hair Jr et al., 2020). The VIF results are shown in Table 3, which indicates that the values are within the ranges.

Table 2 *Discriminant Validity*

	DFC	DFI	DFL	FWB	GRIT
DFC					
DFI	0.655				
DFL	0.732	0.716			
FWB	0.883	0.768	0.877		
GRIT	0.549	0.422	0.462	0.589	
Grit x DFC	0.037	0.032	0.061	0.128	0.113
Note(s): Significance level: Construct Correlation<0.9					

Table 3 *Collinearity Diagnostic*

Paths	VIF
DFC → FWB	2.608
DFI → DFC	2.046
DFI → FWB	2.225
DFL → DFC	2.046
DFL → FWB	2.754
GRIT → FWB	1.486
Grit x DFC → FWB	1.035
Note(s): Significance Level: VIF<5	

Structural Model Assessment

In a structural model, the relationships between the investigated constructs are shown. Figure 2 represents the structural model highlighting the association between DFC, DFL, DFI, grit, and FWB.

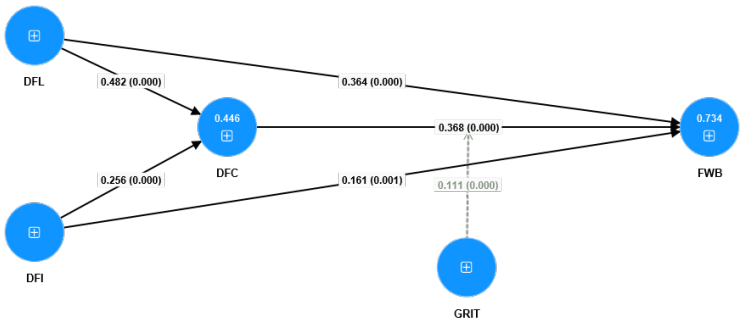

Figure 3 *Path Coefficients in Smart PLS Model*

The coefficient of determination (R^2) explains the predictive strength of the model by indicating the percentage of variation in the endogenous variable that is predictable from exogenous variables. Recommended R^2 values are 0.25, 0.50, and 0.75, representing weak, moderate, and high prediction accuracy, respectively (Hair et al., 2013). In this study, R^2 values for FWB and DFC are 0.734 and 0.446, indicating that FWB is a strong predictor of accuracy, while DFC is a moderate predictor.

Further, in the next step, predictive relevance of endogenous is examined through the test of Q^2. PLS predict is used to analyse the predictive relevance of the exogeneous variables over the endogenous variable. The recommended values of Q^2 is

>0 (Hair et al., 2013). The values of Q^2 have been exhibited in table 5, which are over the threshold limit for predictive relevance. Thus, we can say that the endogenous construct in this model has established predictive relevance.

Table 4 *Value of R^2*

Construct	R^2	Predictive Accuracy
DFC	0.446	Moderate
FWB	0.734	Strong
Note(s): Recommended values of R^2 0.25, 0.50 and 0.75, respectively, describing weak, moderate, and high level of prediction accuracy.		

Table 5 *Value of Q^2*

Construct	Q^2	Predictive Relevance
DFC	0.434	Yes
FWB	0.660	Yes
Note(s): Recommended value: $Q^2>0$		

Another step of assessment in the structural model is effect size (f^2). It uses a numerical scale to assess the degree of relationship between two constructs When the f^2 is 0.02, it is regarded as weak, 0.15, moderate, and 0.35, strong (Cohen et al., 2013; Hair Jr et al., 2020). Table 6 displays the value of f^2 and effect size.

The value of path coefficients (β), indirect effect for mediation, and moderating effect are used to explain the results of hypothesis testing. Using bootstrapping algorithm by applying 10000 subsamples, results are examined to check whether these support our hypothesis or not. The path coefficients range between +1 to -1 where +1 depicts high positive effect and -1 represents high negative effect.

As shown in table 7, DFL, DFI, and DFC drives FWB with path coefficient of β=0.364, β =0.161, and β =0.368, respectively. Also, DFL (β= 0.482) and DFI (β =0.256) significantly influence DFC.

To explore the mediating effect of DFC between DFL and FWB as well as DFI and FWB. The size of mediation was examined using variance accounted for (VAF), which was decided by the indirect effect to total effect ratio (Hair et al., 2013). According to table 8, DFC partially mediates the association among DFL and FWB as well as DFI and FWB, with an indirect effect of 32% and 36%, respectively.

Further, we examined the moderating effect of grit in between DFC and FWB. Table 9 demonstrates a significant positive moderating effect of grit, with β=0.111.

Table 6 *Values of f^2*

Relationship	f^2	Effect Size
DFL→DFC	0.251	Medium
DFL→FWB	0.547	Large
DFI→DFC	0.064	Small
DFI→FWB	0.103	Small
DFC→FWB	0.141	Medium
Note(s): Recommended Values of f^2 → 0.02= small effect, 0.15= medium effect, and 0.35= large effect.		

Table 7 *Summary of Path Coefficients*

Hypothesis	Relationship	β	Standard Deviation	T Statistics	p-values	Decision
H1	DFL→DFC	0.482	0.063	7.654	0.000	Supported
H2	DFL→FWB	0.364	0.046	7.894	0.000	Supported
H3	DFI→DFC	0.256	0.058	4.452	0.000	Supported
H4	DFI→FWB	0.161	0.047	3.416	0.001	Supported
H5	DFC→FWB	0.368	0.044	8.420	0.000	Supported

Table 8 *Summary of Mediation Effect*

Hypothesis	Relationship	Indirect Effect	Total Effect	VAF	Mediation
H6	DFL→DFC→FWB	0.177	0.541	32%	Partial Mediation
H7	DFI→DFC→FWB	0.094	0.255	36%	Partial Mediation

Table 9 *Summary of Moderation Effect*

Hypothesis	Relationship	β	Standard Deviation	T Statistics	p-values	Decision
H8	Grit x DFC→FWB	0.111	0.027	4.095	0.000	Supported

5. Results and Discussions

Major Findings

This study has discussed how the emergence of gig working and other similar temporary arrangements of work has impacted the way an individual manages his money. Where gig workers lack job security, regular compensation, retirement, health and

other social benefits, the boom of digital technologies has caused an overwhelming change in the way individuals manages their finances. In current digital financial environment, it is a challenging task to manage personal finance and lack of financial capability further worsens the situation (Goyal et al., 2021). Therefore, the present study has discussed how to address this problem.

After the COVID-19, FWB of households has shaken due to job loss (Botha et al., 2021), increased health care expenditure(Vargas & Sanchez, 2020), and demise of bread earner of family (Nath et al., 2022). During this period, disruptive digital transformation in the financial sector made digital financial transactions more complex, increasing individuals' vulnerability to fraud and scams. Such radical changes have made digital financial awareness important for being financially well. If gig workers are sensitised with digital finance, they can use it to their advantage for sustainable well-being. This research has developed and validated a theoretical model demonstrating that possession of DFL, DFI and DFC would lead to a significant enhancement in FWB of a gig worker. This study reveals that DFL makes individuals capable of managing their finances and make good financial decisions based on analysis of financial information. This enable gig workers to be financially well using the digital finance. They will be more abled to make good financial decisions which are imperative for achievement of financial goals. DFL creates a positive change in the FWB of gig workers. These results are consistent with Kumar (2023). This change is also created by making them more digitally and financially capable of personal financial management.

Along with DFL, FWB is also positively influenced by DFI. This positive influence is also due to improvement in DFC, because inclusion provides opportunities or a platform for personal financial management which further boosts FWB. Gig workers when included in the digital financial system can access and use various financial services for their betterment. Inclusion in digital finance can boost the FWB of these workers. However, compared to DFI, DFL contributes more to both DFC and FWB, with DFC exerting the most significant positive effect on FWB among all factors. Thus, when gig workers possess digital financial literacy and inclusion, they become more capable to make such financial choices which help them in pursuit of FWB.

The impact of DFC on FWB is significantly moderated by grit. If an individual is gritty, the positive influence of DFC on FWB significantly improves. Thus, the achievement of high FWB due to possession of DFC is more. This implies that gig workers who are gritty will achieve greater financial well-being at a certain level of DFC as compared to less gritty workers.

This study highlights that if DFL, DFI, and DFC of gig workers are improved, it will lead to a significant advancement in their FWB. Further, gritty gig workers can cause significant boost to the advancement of FWB due to DFC. The presence of DFL and possession of DFI will enhance gig workers' FWB, significantly improving their financial freedom, resilience, work productivity, standard of living, and overall health. Along with this such gig workers will be a great sustainable asset to the organisation they are working for since due to high financial well-being they will be well motivated and satisfied.

Theoretical Implications

This research has created and validated a SEM model which provides several contributions to theory of capability and theory of grit. It was determined that FWB is influenced by DFC and its determinants. The empirical findings have supported all the hypothesis. We have investigated the digital aspect of theory of capability which states that financial literacy and inclusion are determinants of financial capability which further improves FWB of the individuals (Sherraden, 2013). This empirical study demonstrates that DFL and DFI significantly contribute to DFC, which in turn positively influences FWB. However, there was a partial mediation of DFC in leading towards FWB which implies that both DFL and DFI have a direct influence on FWB as well. This is a valuable contribution to theory as both internal capability (DFL) and external capability (DFI) had a positive influence on DFC and FWB. Past literature has not investigated all these salient points simultaneously to explore relationships between DFL, DFI, DFC, and FWB.

Based on the theory of grit, its moderating effect was examined between DFC and FWB. This theory emphasized on passion and perseverance for achieving a goal. Grit was found to be a significant positive moderator of the influence of DFC on FWB. Gritty individuals are better equipped to maintain focus and effort overtime leading to a greater achievement of the goal. Grit has a similar effect on FWB as individuals possessing high level of grit have a stronger positive impact of DFC on FWB. The empirical findings validate this theory.

Practical Implications

This study provides effective guidelines to the leaders and managers of organisations hiring gig workers. The results of this study provide a pathway to high FWB which can help the organisation in getting the best productive outcome for its workers as they would not worry about their financial situation. Therefore, organisations can make efforts towards such programs/workshops which can improve their DFL and acquaint them with formal digital financial services. These efforts will significantly improve their DFC. Along with this, leaders can induce such discussion which can improve the level of grit of these individuals. Workers who are well versed with digital finance can prove out to be assets for the organisations. Higher financial well-being ensures that workers are happier, more satisfied, and less stressed, leading to increased productivity and engagement at work while also reducing turnover rates and absenteeism.

It is evident from the results that DFL has a greater positive impact on DFC and FWB. National Centre of Financial Education (NCFE) has made efforts for improving financial literacy of employees of various organisations, SHG members, farmers and rural folks, women groups, MGNREGA cardholders, etc. But gig workers do not fall in the purview of employees as they lack regular employment contracts. Government and practitioners should work in collaboration for

implementation of such programs which can help them in using digital formal financial services for personal financial management. Implementing specific financial literacy and education programs for gig workers can transform their lives by empowering them with the skills and knowledge to effectively manage their finances, leading to greater financial stability and improved overall well-being. Thus, there is a need for specific financial literacy, awareness, and education plans for gig workers.

Policymakers should also emphasize on designing legal/formal employment policies for gig workers as they do not have traditional employment contracts due to which they face uncertainty regarding employment status, benefits, and legal protections like traditional employees. Hence, development and implementation of a regulatory framework will help them in accessing basic rights, minimum pay and protect them against unfair treatment. Policymakers must consider such programs which can bring stability and security to gig workers such as transfer of benefits from one gig to another and formation of gig workers cooperative society or a united platform to address problems. By providing supportive and inclusive environment, policymakers can help gig workers to thrive in this digital economy with improved FWB.

6. Conclusions

This research proposed a conceptual framework and validated it with empirical evidence to provide better understanding of FWB by examining DFL, DFI, DFC, and grit. By integrating digital financial literacy (DFL) and digital financial inclusion (DFI), this research establishes a comprehensive model that demonstrates how these factors contribute to the overall financial well-being of gig workers. Findings revealed that DFL and DFI have a significant positive influence on DFC and FWB where grit positively moderates the impact of DFC on FWB. Furthermore, DFC partially mediates the relation between DFL and FWB as well as DFI and FWB. The results are consistent with theory of capability as there is a partial mediation of DFC to achieve FWB. Improving digital financial literacy, inclusion, and capability, along with fostering grit, empowers gig workers to make informed financial decisions and access essential financial services, leading to greater financial stability and overall quality of life. This enhancement in financial well-being reduces financial stress, promotes savings, and supports long-term financial goals. The findings of this study significantly contribute to the present literature on FWB and provide implication for gig workers, policymakers, and practitioners with pathways to improve FWB. However, this research paper is limited to gig workers, further studies can explore how these determinants behave to have a comprehensive understanding of the concept. The cross-sectional design of the study is another limitation as it does not investigate the longitudinal aspect. Hence, Longitudinal studies are recommended to validate the causal relationships and observe changes over time. Future research should consider diverse geographic locations and varying economic conditions to enhance the external validity of the results. Additionally, while the study examined the moderating effect of grit, other personal attributes such as financial self-efficacy, risk tolerance, and resilience might also play significant roles. Future research could explore these factors to provide a better understanding of the determinants of FWB among gig workers. By addressing these limitations, future researchers can build on the findings of this research to further explore the complex interplay between DFC and FWB, ultimately contributing to application of effective strategies to support various households sustainably in the digital economy.

7. References

1. Aguilar-Ham, P., Beltrán-Godoy, J. H., & Gaxiola-Laso, S. R. (2024). Financial Self-Efficacy, Financial Well-being and Job Satisfaction of Employees in the Metal-Mechanical sector in Chihuahua, Mexico. *Venezuelan Management Magazine*, *106*, 29.
2. Ahmad, M., Majeed, A., Khan, M. A., Sohaib, M., & Shehzad, K. (2021). Digital financial inclusion and economic growth: Provincial data analysis of China. *China Economic Journal*, *14*(3), 291–310.
3. Alhadabi, A., & Karpinski, A. C. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in University students. *International Journal of Adolescence and Youth*, *25*(1), 519–535.
4. Apriansah, A., Mulyatini, N., & Prabowo, F. H. E. (2022). Financial Well-Being: A Way to Maintain Long-Term Financial Security. *JURISMA: Jurnal Riset Bisnis & Manajemen*, *12*(2), 230–252.
5. Aristei, D., Gallo, M., & Vannoni, V. (2024). Preferences for ethical intermediaries and sustainable investment decisions in micro-firms: The role of financial literacy and digital financial capability. *Research in International Business and Finance*, *71*. Scopus. https://doi.org/10.1016/j.ribaf.2024.102483
6. Arnaut, D., & Bećirović, D. (2023). FinTech Innovations as Disruptor of the Traditional Financial Industry. In S. Benković, A. Labus, & M. Milosavljević (Eds.), *Digital Transformation of the Financial Industry* (pp. 233–254). Springer International Publishing. https://doi.org/10.1007/978-3-031-23269-5_14
7. Arriagada, A., Bonhomme, M., Ibáñez, F., & Leyton, J. (2023). The gig economy in Chile: Examining labor conditions and the nature of gig work in a Global South country. *Digital Geography and Society*, *5*, 100063.
8. Aziz, A., & Naima, U. (2021). Rethinking digital financial inclusion: Evidence from Bangladesh. *Technology in Society*, *64*, 101509.
9. Bashir, I., & Qureshi, I. H. (2023). A systematic literature review on personal financial well-being: The link to key Sustainable Development Goals 2030. *FIIB Business Review*, *12*(1), 31–48.
10. Bashir, I., Qureshi, I. H., & Ilyas, Z. (2024). How does employee financial well-being influence employee productivity: A moderated mediating examination. *International Journal of Social Economics*.

11. Bhatia, S., & Singh, S. (2023). Exploring financial well-being of working professionals in the Indian context. *Journal of Financial Services Marketing*. Scopus. https://doi.org/10.1057/s41264-023-00215-x
12. Botha, F., de New, J. P., de New, S. C., Ribar, D. C., & Salamanca, N. (2021). Implications of COVID-19 labour market shocks for inequality in financial wellbeing. *Journal of Population Economics*, *34*(2), 655–689.
13. Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, *79*, 228–237.
14. CFPB, C. F. P. B. (2018). *Pathways to financial well-being: The role of financial capability*. https://files.consumerfinance.gov/f/documents/bcfp_financial-well-being_pathways-role-financial-capability_research-brief.pdf
15. Chinoda, T., & Kapingura, F. M. (2024). Digital financial inclusion and economic growth in Sub-Saharan Africa: The role of institutions and governance. *African Journal of Economic and Management Studies*, *15*(1), 15–30.
16. Choung, Y., Chatterjee, S., & Pak, T.-Y. (2023). Digital financial literacy and financial well-being. *Finance Research Letters*, *58*. Scopus. https://doi.org/10.1016/j.frl.2023.104438
17. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
18. Collins, J. M., & Urban, C. (2018). Understanding financial well-being over the lifecourse: An exploration of measures. *Montana State University. Retrieved from Https://Www. Monta Na. Edu/Urban/Draft_ FWB_*.
19. Datu, J. A. D. (2021). Beyond passion and perseverance: Review and future research initiatives on the science of grit. *Frontiers in Psychology*, *11*, 545526.
20. Ding, G., & Kang, N. (2023). The Impact of Digital Financial Inclusion on China's Regional Disparities in the Quality of Economic Development: Based on the Relational Data Paradigm. *Economic Analysis and Policy*.
21. Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *92*(6), 1087.
22. Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the Short Grit Scale (GRIT–S). *Journal of Personality Assessment*, *91*(2), 166–174.
23. Dzogbenuku, R. K., Amoako, G. K., Kumi, D. K., & Bonsu, G. A. (2022). Digital payments and financial wellbeing of the rural poor: The moderating role of age and gender. *Journal of International Consumer Marketing*, *34*(2), 113–136.
24. Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149
25. Gerrans, P., Speelman, C., & Campitelli, G. (2014). The relationship between personal financial wellness and financial wellbeing: A structural equation modelling approach. *Journal of Family and Economic Issues*, *35*, 145–160.
26. Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, *45*(1), 80–105.
27. Goyal, K., Kumar, S., Rao, P., Colombage, S., & Sharma, A. (2021). Financial distress and COVID-19: Evidence from working individuals in India. *Qualitative Research in Financial Markets*, *13*(4), 503–528.
28. Guo, B., Feng, Y., & Lin, J. (2023). Digital inclusive finance and digital transformation of enterprises. *Finance Research Letters*, *57*, 104270.
29. Guo, B., & Huang, J. (2023). Financial Well-Being and Financial Capability among Low-Income Entrepreneurs. *Journal of Risk and Financial Management*, *16*(3), 181.
30. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, *46*(1–2), 1–12.
31. Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101–110.
32. Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, *26*(2), 106–121.
33. Hasan, M., Le, T., & Hoque, A. (2021). How does financial literacy impact on inclusive finance? *Financial Innovation*, *7*(1), 40. https://doi.org/10.1186/s40854-021-00259-9
34. HASSAN, M. F., HASSAN, N. M., KASSIM, E. S., & SAID, Y. M. U. (2021). Financial wellbeing and mental health: A systematic review. *Estudios de Economia Aplicada*, *39*(4). Scopus. https://doi.org/10.25115/eea.v39i4.4590
35. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*, 115–135.
36. Kamble, P. A., Mehta, A., & Rani, N. (2023). Financial Inclusion and Digital Financial Literacy: Do they Matter for Financial Well-being? *Social Indicators Research*. Scopus. https://doi.org/10.1007/s11205-023-03264-w
37. Karam, J., Haddad, C., Sacre, H., Serhan, M., Salameh, P., & Jomaa, L. (2022). Financial wellbeing and quality of life among a sample of the Lebanese population: The mediating effect of food insecurity. *Frontiers in Nutrition*, *9*, 906646.
38. Khera, P., Ng, S., Ogawa, S., & Sahay, R. (2022). Measuring digital financial inclusion in emerging market and developing economies: A new index. *Asian Economic Policy Review*, *17*(2), 213–230.
39. Koskelainen, T., Kalmi, P., Scornavacca, E., & Vartiainen, T. (2023). Financial literacy in the digital age—A research agenda. *Journal of Consumer Affairs*, *57*(1), 507–528. https://doi.org/10.1111/joca.12510

40. Kumar, P., Pillai, R., Kumar, N., & Tabash, M. I. (2023). The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being. *Borsa Istanbul Review*, *23*(1), 169–183.
41. 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*.
42. Lin, Y.-C., O'Connell, K. L., & Law, K. C. (2023). Moderating roles of grit and locus of control on rumination and suicidality. *Journal of Affective Disorders*, *330*, 250–258.
43. Liu, Y., Luan, L., Wu, W., Zhang, Z., & Hsu, Y. (2021). Can digital financial inclusion promote China's economic growth? *International Review of Financial Analysis*, *78*, 101889.
44. Luo, Y., Peng, Y., & Zeng, L. (2021). Digital financial capability and entrepreneurial performance. *International Review of Economics & Finance*, *76*, 55–74.
45. Luo, Y., & Zeng, L. (2020). Digital financial capabilities and household entrepreneurship. *Economic and Political Studies*, *8*(2), 165–202.
46. Lyons, A. C., & Kass-Hanna, J. (2021). A methodological overview to defining and measuring "digital" financial literacy. *Financial Planning Review*, *4*(2), e1113.
47. Mahendru, M., Sharma, G. D., & Hawkins, M. (2022). Toward a new conceptualization of financial well-being. *Journal of Public Affairs*, *22*(2), e2505.
48. Meng, D. (2023). Digital financial capability and household consumption: Evidence from China. *Applied Economics Letters*, 1–5.
49. Mir, M. A. (2024). Digital financial literacy and financial well-being. In *Eme. Perspectives on Financ. Well-Being* (pp. 57–73). IGI Global; Scopus. https://doi.org/10.4018/979-8-3693-1750-1.ch003
50. Mishra, N., Grima, S., & Ozen, E. (2024). Unpacking the black box: Investigating the role of social protection programmes in promoting decent work and economic growth in low-income countries. *Sustainable Development*, sd.3008. https://doi.org/10.1002/sd.3008
51. Morgan, P. J., Huang, B., & Trinh, L. Q. (2019). The need to promote digital financial literacy for the digital age. *IN THE DIGITAL AGE*.
52. Nath, S. D., Jamshed, K. M., & Shaikh, J. M. (2022). The impact of the COVID-19 pandemic on subsistence consumers' well-being and coping strategies: Insights from India and Bangladesh. *Journal of Consumer Affairs*, *56*(1), 180–210.
53. Noskov, V. A., & Kazymov, E. A. (2024). Economic and Digital Aspects of the Formation of the Gig Economy. In V. V. Mantulenko, J. Horák, & J. Kučera (Eds.), *Proceedings of the XI International Scientific Conference "Digital Transformation of the Economy: Challenges, Trends and New Opportunities" (ISCDTE 2024)* (Vol. 1063, pp. 93–98). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-65662-0_13
54. Nurkholik, A. (2024). R Approach in Digital Financial Literacy Influence Subjective Financial Well-Being. *Revista Mexicana de Economia y Finanzas Nueva Epoca*, *19*(1). Scopus. https://doi.org/10.21919/remef.v19i1.935
55. Nussbaum, M. C., & Capabilities, C. (2011). The human development approach. *Creating Capabilities. Cambridge, MA: Belknap Press of Harvard*.
56. Nykiforuk, C. I. J., Belon, A. P., De Leeuw, E., Harris, P., Allen-Scott, L., Atkey, K., Glenn, N. M., Hyshka, E., Jaques, K., Kongats, K., Montesanti, S., Nieuwendyk, L. M., Pabayo, R., Springett, J., & Yashadhana, A. (2023). An action-oriented public health framework to reduce financial strain and promote financial wellbeing in high-income countries. *International Journal for Equity in Health*, *22*(1), 66. https://doi.org/10.1186/s12939-023-01877-8
57. Obaid, H. J., Hama, K. N. K., & Yasir, M. H. (2023). The Role of Financial Literacy in Achieving Financial Satisfaction Through Financial Well-Being. *International Journal of Professional Business Review*, *8*(7), e01607–e01607.
58. Panos, G. A., & Wilson, J. O. S. (2020). Financial literacy and responsible finance in the FinTech era: Capabilities and challenges. *European Journal of Finance*, *26*(4–5), 297–301. Scopus. https://doi.org/10.1080/1351847X.2020.1717569
59. Parvathy, V., & Kumar, J. (2022). Financial capability and financial wellbeing of women in community-based organizations: Mediating role of decision-making ability. *Managerial Finance*, *ahead-of-print*.
60. Prakash, N., Alagarsamy, S., & Hawaldar, A. (2022). Demographic characteristics influencing financial wellbeing: A multigroup analysis. *Managerial Finance*.
61. Prakash, N., & Hawaldar, A. (2024). Investigating the Determinants of Financial Well-Being: A SEM Approach. *Business Perspectives and Research*, *12*(1), 11–25.
62. Rahayu, R., Juita, V., & Rahman, A. (2023). Financial Literacy, Digital Financial Literacy and Women's Economic Empowerment. *Journal of Telecommunications and the Digital Economy*, *11*(2), 118–138. Scopus. https://doi.org/10.18080/jtde.v11n2.700
63. RASHID, S., BOWRA, Z. A., & HUSSAIN, A. (2022). AN EMPIRICAL INVESTIGATION OF FINANCIAL INCLUSION ON FINANCIAL WELLBEING OF WORKING WOMEN: A MEDIATING ROLE OF FINANCIAL CAPABILITY. *Bulletin of Business and Economics (BBE)*, *11*(1), 14–23.
64. Sabri, M., & Anthony, R. (2019). The impact of a financial capability program on the financial well-being of medical practitioners. *Shanlax Int. J. Manag*, *6*, 18–23.
65. Sabri, M., Wijekoon, R., & Rahim, H. (2020). The influence of money attitude, financial practices, self-efficacy and emotion coping on employees' financial well-being. *Management Science Letters*, *10*(4), 889–900.
66. Sarma, M. (2008). *Index of financial inclusion (Working Paper No. 215). Indian Council for Research on International Economic Relations (ICRIER), New Delhi*.

67. Scandurra, R., & Calero, J. (2020). How adult skills are configured? *International Journal of Educational Research*, *99*, 101441.
68. Schimschal, S. E., Visentin, D., Kornhaber, R., & Cleary, M. (2022). Achieving Long-term Goals Amidst Uncertainty: An Integrative Model for the Psychological Resources of Grit. *The Journal of Continuing Education in Nursing*, *53*(8), 355–363. https://doi.org/10.3928/00220124-20220706-06
69. Sehrawat, K., Vij, M., & Talan, G. (2021). Understanding the path toward financial well-being: Evidence from India. *Frontiers in Psychology*, *12*, 638408.
70. Setiawan, M., Effendi, N., Santoso, T., Dewi, V. I., & Sapulette, M. S. (2022). Digital financial literacy, current behavior of saving and spending and its future foresight. *Economics of Innovation and New Technology*, *31*(4), 320–338.
71. Sherraden, M. S. (2013). Building blocks of financial capability. *Financial Education and Capability: Research, Education, Policy, and Practice*, 3–43.
72. Silva, M., & NYOBE, S. (2023). Social sustainability in the gig economy era: Insights from the on-demand delivery sector. *Revue Française de Gestion Industrielle*, *37*(1), 55–69.
73. Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The relation between financial literacy, financial wellbeing and financial concerns. *International Journal of Business and Management*, *8*(11), 63.
74. Tahir, M. S., & Ahmed, A. D. (2021). Australians' Financial Wellbeing and Household Debt: A Panel Analysis. *Journal of Risk and Financial Management*, *14*(11). Scopus. https://doi.org/10.3390/jrfm14110513
75. Tang, X., Wang, M.-T., Parada, F., & Salmela-Aro, K. (2021). Putting the Goal Back into Grit: Academic Goal Commitment, Grit, and Academic Achievement. *Journal of Youth and Adolescence*, *50*(3), 470–484. https://doi.org/10.1007/s10964-020-01348-1
76. Tay, L.-Y., Tai, H.-T., & Tan, G.-S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon*.
77. Uthaileang, W., & Kiattisin, S. (2023). Developing the capability of digital financial literacy in developing countries: A Case of online loan for small entrepreneurs. *Heliyon*, *9*(12).
78. Vargas, E. D., & Sanchez, G. R. (2020). COVID-19 is having a devastating impact on the economic well-being of Latino families. *Journal of Economics, Race, and Policy*, *3*, 262–269.
79. Voznyak, H., Mulska, O., Bil, M., Patytska, K., & Lysiak, L. (2022). FINANCIAL WELL-BEING OF TERRITORIAL COMMUNITIES AND THE ECONOMIC GROWTH OF THE REGIONS OF UKRAINE: ASSESSMENT AND MODELING OF INTERRELATION. *Agricultural and Resource Economics*, *8*(2), 141–157. Scopus. https://doi.org/10.51599/are.2022.08.02.08
80. Wang, Y. (2024). Digital Financial Capability and Entrepreneurship in China: A Digital Economy Perspective. *Sustainability*, *16*(16), 6885.
81. Wu, D., & Huang, J. L. (2024). Gig work and gig workers: An integrative review and agenda for future research. *Journal of Organizational Behavior*, *45*(2), 183–208. https://doi.org/10.1002/job.2775
82. Xiao, J. J., Huang, J., Goyal, K., & Kumar, S. (2022). Financial capability: A systematic conceptual review, extension and synthesis. *International Journal of Bank Marketing*, *ahead-of-print*.
83. Zvavahera, P., Chigora, F., & Aquino, E. (2024). Location-Based Gig Work in Emerging Economies: A Literature Review. In K. Ogunyemi (Ed.), *Humanistic Management in the Gig Economy* (pp. 153–182). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-59944-6_8