



Research Paper

Factors Associated with the Adaptation of Freelancing by Selected State University Students in Sri Lanka

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Abstract

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The freelance career model has become a global trend in the 21st century, especially popular among the younger generation. Freelancing refers to a work arrangement where individuals offer their services to clients or businesses on a project-by-project basis, working independently with multiple clients simultaneously. Sri Lanka faces a significant unemployment issue, particularly among youth, which the government has struggled to resolve. This research investigates the factors influencing the adoption of freelancing among selected state university students in Sri Lanka. A mixed-methods approach was adopted, involving surveys and interviews with a sample of 382 students from four state universities. The findings reveal a positive inclination among students toward freelancing, with key relationships identified. These include the impact of personal restraints, payment restraints, freelance market characteristics, technical knowledge, and social restraints on freelancing adaptation. The study offers valuable insights for educational institutions, policymakers, and students to effectively integrate freelancing into the academic environment.

Keywords: Adaptation, Freelancing, Sri Lanka, State university students, Unemployment

1. Introduction

The freelance career model has become a global trend in the 21st century, gaining popularity especially among the younger generation. Freelancing involves working independently as a self-employed individual, often referred to as an independent contractor, being hired by various clients on a part-time or short-term basis with differing compensation and commitment levels compared to full-time employees (Dosunmu et al., 2022). Unlike traditional employees, freelancers frequently move between different projects and employers, offering their services through online platforms, advertisements, or personal connections (Opait et al., 2019). This dynamic and flexible nature of freelancing appeals to many, providing opportunities to work on diverse projects, set their own schedules, and often work remotely from anywhere in the world.

In recent years, freelancing has evolved from being perceived as irregular work associated with joblessness to a viable and often preferred employment option. Many corporations now outsource specific tasks to freelancers to reduce production expenses, which has led to a significant rise in the popularity of freelancing (Akhmetshin et al., 2018). Freelancers can be found in all types of jobs and skill levels, and freelancing is a common type of work arrangement used by businesses of all sizes and across different industries (Dosunmu et al., 2022). This shift has been driven by advancements in technology, particularly the internet, which has facilitated the growth of online platforms connecting freelancers with clients globally.

Freelancers can be seen as a mix of employees and entrepreneurs. They are like employees because they are hired by companies to provide their professional expertise for a specific period. Unlike other entrepreneurs or self-employed individuals who sell physical products, freelancers offer their intangible knowledge (Opait et al., 2019). However, freelancers can also be considered entrepreneurs because they work independently, taking risks and seeking rewards without the support or guarantees of an organization (Opait et al., 2019). This entrepreneurial aspect of freelancing allows individuals to leverage their skills and knowledge to build a personal brand, set their own rates, and choose projects that align with their interests and career goals.

The growing trend of business processes being divided into smaller components known as short-term projects has led to the emergence of the gig economy. The gig economy represents a market system characterized by organizations and workers engaging in short-term work arrangements (Huđek et al., 2020). This trend is further exemplified by the proliferation of online labor platforms worldwide, facilitating job placement in this evolving gig economy landscape (Huđek et al., 2020). Platforms such as Upwork, Fiverr, and Freelancer have become central hubs where freelancers can showcase their skills, bid on projects, and secure work. These platforms provide a range of tools and resources to support freelancers, including payment processing, project management, and dispute resolution services.

The market size of freelance platforms was valued at USD 5,181.68 million in 2022 and is projected to reach USD 17,280.39 million by 2030 (Freelance Platforms Market Share, 2023). This substantial growth highlights the increasing reliance on freelance talent by businesses and the growing acceptance of freelancing as a legitimate career path. The flexibility and cost-effectiveness of hiring freelancers make it an attractive option for companies, particularly small and medium-sized enterprises (SMEs) that may not have the resources to hire full-time employees.

Sri Lanka, facing a longstanding unemployment issue, particularly among its youth, stands to benefit from the freelancing trend. Despite high literacy rates and increasing internet penetration, freelancing remains largely unexplored among the Sri Lankan population (Perampalam & Galpaya, 2016). University students, who represent a unique group due to their educational background and potential career paths, have shown interest in freelancing as a means to gain real-world experience and financial independence during their studies (Amitha, 2018). The potential for freelancing to provide supplementary income and flexible work schedules makes it an appealing option for students balancing academic commitments with the need to support themselves financially.

A pilot survey conducted among state university students in Sri Lanka revealed that while 72.1% had heard about freelancing, 81.4% had never engaged in it during their university life, though 48.8% expressed willingness to do so in the future (Perampalam & Galpaya, 2016). This gap indicates a need to understand the factors influencing the adaptation of freelancing among these students. Addressing this gap can help universities and policymakers develop targeted programs and initiatives to promote freelancing as a viable career option, providing students with the skills and knowledge needed to succeed in this field.

Despite the potential benefits of freelancing, there is a lack of comprehensive studies examining the factors that influence its adaptation among university students in Sri Lanka. This research aims to fill this gap by exploring the key determinants that affect students' decisions to engage in freelancing. These factors include personal restraints, such as time management and balancing work with academic responsibilities; freelance market characteristics, such as the availability of opportunities and competition; technical knowledge, including digital literacy and proficiency with online tools; payment restraints, such as payment processing and financial security; and social restraints, including family expectations and societal perceptions of freelancing.

This study aims to explore the factors influencing the adaptation of freelancing among state university students in Sri Lanka. The specific research questions addressed are: What are the factors associated with the adaptation of freelancing by state university students in Sri Lanka? How do personal restraints impact the adaptation of freelancing? What is the role of freelance market characteristics in freelancing adaptation? How does technical knowledge influence freelancing adaptation? What impact do payment restraints have on freelancing

adaptation? How do social restraints affect the adaptation of freelancing? By answering these questions, the study seeks to provide valuable insights for educational institutions, policymakers, and industry stakeholders to support the integration of freelancing into the academic environment.

The findings of this study will offer valuable insights for educational institutions, policymakers, and students. By understanding the factors that influence the adaptation of freelancing, these stakeholders can develop strategies to support and integrate freelancing into the academic environment effectively. This can help students gain real-world experience, financial independence, and enhance their employability in a competitive job market. Additionally, the study's insights can inform the development of training programs and resources to equip students with the skills needed to succeed in the freelance market, ultimately contributing to the reduction of youth unemployment in Sri Lanka.

2. Literature Review

2.1 Evolution of Freelancing

The term "freelance" originated in the 1800s, initially used to describe a type of soldier who would fight for anyone who paid them the most, much like medieval mercenaries (Dosunmu et al., 2022). Over time, the concept evolved, and freelancing became a way for individuals to offer their services to local businesses, thereby boosting sales and fulfilling various tasks (Raquel, 2021). The emergence and growth of the internet transformed freelancing by removing geographical barriers and allowing individuals to sell their skills online. This evolution has made freelancing accessible to a broader audience, enabling professionals to work from anywhere with internet access, thereby expanding their client base and increasing their earning potential (Akhmetshin et al., 2018). The digital age has further propelled this transformation, with online platforms providing freelancers with tools to market their services, manage projects, and receive payments securely.

2.2 Types of Freelancers

Freelancers can be classified into several categories based on their work patterns and commitments. According to Gavizon (2019), there are five distinct categories of freelancers: independent contractors, moonlighters, temporary workers, diversified workers, and freelance business owners. Independent contractors engage in freelancing as their primary occupation. Moonlighters freelance in addition to their primary employment. Temporary workers are hired on a short-term basis by various organizations. Diversified workers handle multiple types of projects, and freelance business owners run small businesses with a few employees while also working as freelancers themselves. This classification highlights the diverse nature of freelancing and the various ways individuals can engage in freelance work, catering to different needs and lifestyles. Each type of freelancer faces unique challenges and opportunities. For instance, independent contractors may struggle with job security but enjoy the freedom of choosing their projects, while moonlighters benefit from additional income streams but must balance multiple job responsibilities. Temporary workers often experience fluctuating

workloads and income, while diversified workers need to manage multiple skill sets and client relationships simultaneously. Freelance business owners, on the other hand, must navigate the complexities of running a business, including hiring staff, managing operations, and ensuring client satisfaction.

2.3 Freelancers as Entrepreneurs

Freelancers are often seen as a hybrid between employees and entrepreneurs. They are hired by companies to provide professional expertise for a specific period, similar to employees, but they work independently, taking risks and seeking rewards without organizational support, which aligns with entrepreneurial characteristics (Opait et al., 2019). This entrepreneurial aspect allows freelancers to leverage their skills and build personal brands, setting their rates and selecting projects that match their career goals. Additionally, freelancers can diversify their income streams by taking on multiple clients and projects simultaneously, reducing dependency on a single employer and increasing job security (Dosunmu et al., 2022). The entrepreneurial mindset required for freelancing includes traits such as resilience, adaptability, and a proactive approach to networking and skill development. Freelancers must continuously market themselves, seek new opportunities, and manage their business operations, including finances and client relationships. Successful freelancers often adopt strategies from traditional business models, such as creating business plans, setting financial goals, and investing in personal development. They may also engage in continuous learning through online courses, workshops, and professional networks to stay updated with industry trends and enhance their skills.

2.4 The Gig Economy

The gig economy refers to a market system where organizations and workers engage in short-term work arrangements (Huđek et al., 2020). This trend is driven by the division of business processes into smaller components or short-term projects, facilitated by online platforms such as Upwork, Fiverr, and Freelancer. These platforms connect freelancers with clients worldwide, providing tools for project management, payment processing, and dispute resolution (Huđek et al., 2020). The gig economy has seen substantial growth, with the market size of freelance platforms projected to reach USD 17,280.39 million by 2030 (Freelance Platforms Market Share, 2023). This growth reflects the increasing acceptance of gig work as a viable employment model, offering flexibility and opportunities for both freelancers and employers. The gig economy is characterized by its flexibility, allowing workers to choose their hours and projects. However, it also presents challenges such as income instability and lack of traditional employment benefits like health insurance and retirement plans. To navigate these challenges, gig workers often adopt multiple income streams and utilize financial planning tools to manage their earnings. Some freelancers also seek supplemental benefits through professional associations or online platforms that offer discounted health insurance and retirement plans.

2.5 Freelance Market Characteristics

The freelance market offers a wide range of opportunities across different industries and skill levels. Business process outsourcing (BPO) has played a significant role in the growth of the freelance market by allowing companies to hire third-party vendors to handle specific tasks or operations (Bloomenthal, 2022). Online outsourcing, defined as hiring people from all over the world through the internet, has further expanded the market, enabling clients to find and work with remote workers efficiently (Kuek et al., 2015). Freelance platforms like Upwork and Fiverr facilitate these connections, providing a meeting point for clients and freelancers while ensuring trust and confidence through structured setups (Thamareendra Seneviratne & Lanka, 2016). The benefits of these platforms include access to a global talent pool, cost savings for businesses, and the ability for freelancers to find work that matches their skills and preferences. The freelance market's characteristics vary significantly by industry and region. For instance, the demand for IT and creative services often exceeds supply, leading to higher rates and more opportunities for skilled freelancers. Conversely, other fields may experience saturation, making it more challenging for freelancers to secure consistent work. The nature of freelance work also varies by region, with some areas offering more opportunities for remote work due to better digital infrastructure and higher internet penetration rates. Additionally, certain industries, such as technology and creative services, have a higher demand for freelance talent compared to others, such as manufacturing or healthcare.

2.6 Freelancing in Sri Lankan Context

In Sri Lanka, online freelancing is gaining popularity, particularly among the youth. The country has a high literacy rate and increasing internet penetration, making it a fertile ground for freelancing (Central Bank of Sri Lanka, 2020). Despite this potential, freelancing remains relatively unknown to a significant portion of the population, especially among females (Galpaya et al., 2018). Many Sri Lankans engage in freelancing part-time due to concerns about job security and fixed income (Senanayake et al., 2018). The most common sectors for freelancers in Sri Lanka include software and web development, data entry, surveys, and graphic design (Thamareendra Seneviratne & Lanka, 2016). The potential for higher earnings compared to traditional employment, particularly due to payments in foreign currency, makes freelancing an attractive option for many Sri Lankans (Amitha, 2018).

2.7 Barriers and Challenges in Sri Lanka

Despite the growing interest, several barriers hinder the widespread adoption of freelancing in Sri Lanka. These barriers include limited awareness of freelancing opportunities, inadequate access to digital infrastructure in rural areas, and cultural attitudes that favor traditional employment (Gunawardena & Jayathilaka, 2020). Many individuals lack the necessary digital literacy and technical skills to compete effectively in the global freelance market. Additionally, societal perceptions often undervalue freelancing as a legitimate career option, leading to reluctance among potential freelancers to pursue it full-time. Addressing these barriers through targeted initiatives and policy measures can help unlock the full potential of freelancing as a career option in Sri Lanka. Efforts to improve digital infrastructure,

particularly in rural areas, can enhance access to freelancing opportunities for a broader segment of the population. Additionally, public awareness campaigns highlighting the benefits and legitimacy of freelancing can shift societal perceptions and encourage more individuals to explore this career path. Providing training programs and resources to enhance digital literacy and technical skills can also empower potential freelancers to compete effectively in the global market.

2.8 Government and Institutional Support

To promote freelancing, the Sri Lankan government and educational institutions have started to recognize the importance of digital skills and freelancing. Initiatives such as the "Freelance Economy" program by the Information and Communication Technology Agency (ICTA) aim to provide training and support for aspiring freelancers (ICTA, 2020). Universities are also incorporating digital skills and freelancing modules into their curricula to prepare students for the demands of the gig economy. These efforts are crucial in equipping the younger generation with the skills and knowledge needed to succeed in the freelance market. Government policies that support freelancing, such as tax incentives and simplified regulatory frameworks, can further boost the sector's growth. Collaboration between the government, educational institutions, and industry stakeholders can create a supportive ecosystem for freelancers, fostering innovation and economic development. Additionally, partnerships with international organizations and platforms can provide Sri Lankan freelancers with access to global markets and resources.

2.9 Factors Influencing Freelancing Adaptation

Several factors influence the adaptation of freelancing among students, which can be categorized as personal, market, technical, payment, and social restraints:

1. **Personal Restraints:** Personal constraints such as time management, balancing work with academic responsibilities, and maintaining a work-life balance can significantly impact students' decisions to engage in freelancing. Effective time management skills are crucial for freelancers to juggle multiple projects and deadlines. Additionally, the flexibility of freelancing can help students accommodate their academic schedules, allowing them to gain practical experience without compromising their studies (Liaw, 2008). The ability to manage personal responsibilities and freelancing tasks efficiently can significantly affect students' willingness to adopt freelancing as a viable career option. For example, students who are adept at managing their time and setting boundaries between work and study are more likely to succeed in freelancing. Conversely, those who struggle with organization and time management may find it challenging to balance freelancing with their academic commitments. Techniques such as prioritizing tasks, setting realistic goals, and using productivity tools can help freelancers manage their time effectively.

2. **Freelance Market Characteristics:** The availability of opportunities, competition, and market demand play a vital role in influencing freelancing adaptation. Students need to be aware of the market trends and demands to position themselves effectively and secure projects. Understanding niche markets and specializing in specific skills can help students stand out in a competitive freelance environment (Gavizon, 2019). Additionally, the reputation and reliability of freelance platforms, as well as the presence of a supportive community, can influence students' decisions to engage in freelancing. For instance, platforms that offer robust support systems, including dispute resolution and community forums, can provide freelancers with the confidence and resources needed to navigate challenges. Students should also be aware of seasonal fluctuations in demand and adapt their strategies accordingly, such as by diversifying their skill sets or seeking opportunities in emerging markets. Networking with other freelancers and joining professional associations can provide valuable insights and opportunities.
3. **Technical Knowledge:** Digital literacy and proficiency with online tools are essential for freelancers. Students must possess the necessary technical skills to navigate freelance platforms, communicate with clients, and deliver high-quality work. Continuous learning and staying updated with the latest technological advancements can enhance students' capabilities and improve their chances of success in the freelance market (Hudek et al., 2021). Technical skills, including proficiency in software relevant to their field, are crucial for delivering quality work and meeting client expectations. For example, graphic designers need to be proficient in design software like Adobe Creative Suite, while web developers must be skilled in programming languages and web development tools. Additionally, understanding cybersecurity principles is essential for protecting sensitive client information and maintaining professional integrity. Freelancers can enhance their technical knowledge through online courses, certifications, and practical experience.
4. **Payment Restraints:** Payment processing and financial security are critical concerns for freelancers. Reliable payment methods and fair compensation are necessary to ensure financial stability and motivate students to pursue freelancing. Issues such as high transaction fees, currency conversion rates, and the lack of secure payment gateways can pose challenges for freelancers in Sri Lanka (Amitha, 2018). Ensuring timely and secure payments is essential for building trust and sustaining a long-term freelancing career. Additionally, knowledge of financial management, including budgeting and saving, can help freelancers manage their income effectively. For instance, freelancers should be aware of tax obligations and set aside a portion of their earnings for tax payments. Utilizing financial tools and resources, such as invoicing software and budgeting apps, can help freelancers track their income and expenses, ensuring financial stability and growth. Freelancers should also consider diversifying their income streams and establishing emergency funds to mitigate financial risks.

5. **Social Restraints:** Family expectations and societal perceptions can influence students' decisions to engage in freelancing. Support from family and a positive societal view of freelancing as a legitimate career option can encourage students to explore freelancing opportunities. Addressing cultural and societal barriers is essential to creating an environment where freelancing is seen as a viable and respectable career path (Galpaya et al., 2018). The acceptance of freelancing by peers and mentors can also play a significant role in students' adaptation to freelancing. For example, having role models who have successfully built freelancing careers can inspire students and provide practical insights into navigating the freelancing landscape. Additionally, educational institutions can play a pivotal role by incorporating freelancing modules into their curricula and providing support services, such as career counseling and networking events, to help students explore freelancing opportunities. Creating awareness campaigns and showcasing successful freelance professionals can help change societal perceptions and encourage more individuals to consider freelancing as a viable career option.

3. Methodology

3.1 Conceptual Framework

A conceptual framework in research is a structure that outlines the key concepts, variables, and relationships that form the theoretical foundation of a study. It helps researchers organize their thoughts, define the scope of their investigation, and guide the formulation of research questions and hypotheses.

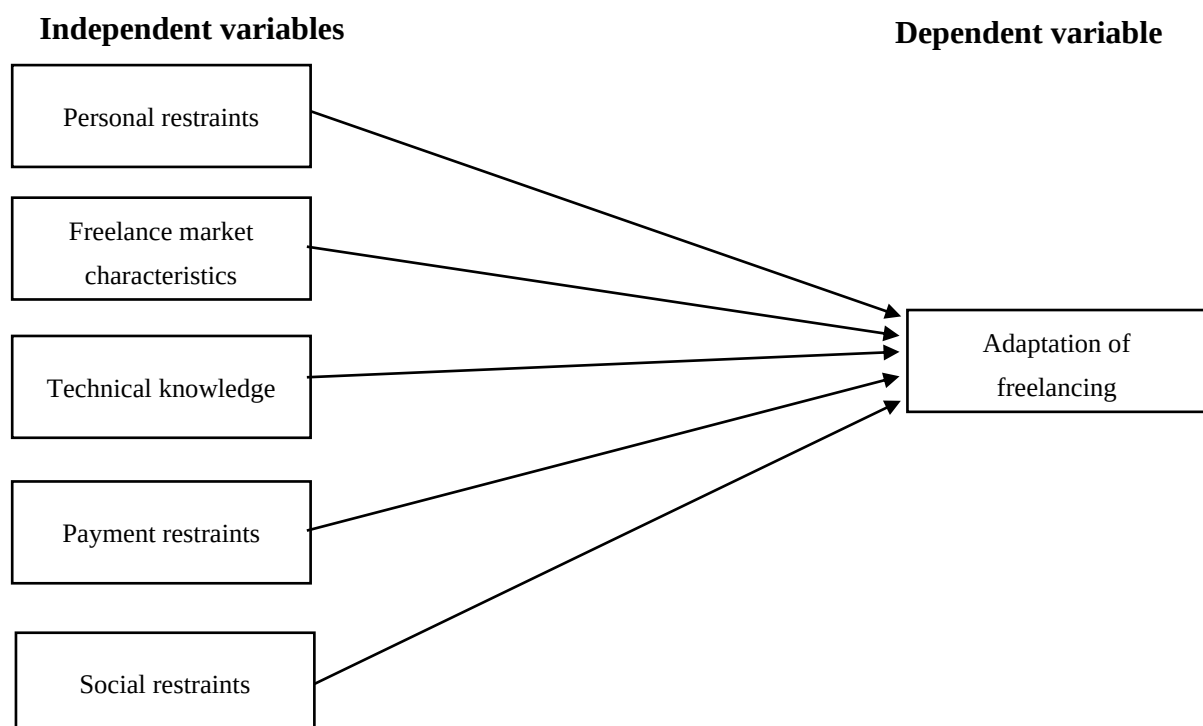


Figure 1. Conceptual Framework

Source: Developed by Researcher

This study adopts a deductive research approach, beginning with existing theories and literature. This approach allows for the formulation and testing of hypotheses through empirical data analysis. The study is explanatory, aiming to explain relationships between variables and explore causal explanations. It focuses on identifying factors associated with the adaptation of freelancing by state university students in Sri Lanka, explaining how personal restraints, freelance market characteristics, technical knowledge, payment restraints, and social restraints impact this adaptation. A survey strategy was employed, involving the collection of data from a representative sample using structured questionnaires. This approach facilitates efficient data collection and provides a broad overview of the research topic by capturing the perspectives and experiences of a large number of state university students. The study is cross-sectional, meaning data was collected at a specific point in time rather than tracking participants over an extended period.

The population consists of undergraduate students from four state universities in Sri Lanka: the University of Sri Jayewardenepura, the University of Kelaniya, the University of Moratuwa, and the University of Colombo. According to the University Grants Commission, the population of undergraduates in these universities is 49,500. The sample size was determined to be 382 undergraduates, calculated at a 95% confidence level and a 5% margin of error. The simple random sampling method was used to select participants. Primary data was collected through a self-administered Google form questionnaire distributed to students of the selected universities in the Western Province. The data collection period was one month and one week. The survey questionnaire, developed based on previous research, was divided into three sections: demographic details, and questions measuring dependent and independent variables. Nominal scale questions were used for demographic details, and five-point Likert scales were used for the other sections. Various measurement scales were utilized to capture the responses accurately.

SPSS (Statistical Package for the Social Sciences) version 21 was used for statistical analysis. Hypotheses were tested through correlation and regression analyses to determine their acceptance or rejection. Descriptive statistics, including mean, standard deviation, and skewness, were calculated for both independent and dependent variables. This analysis focused on demographic factors such as age, gender, and education to gain insights into the population's composition and trends. Reliability tests assessed the consistency and stability of measurement instruments. Descriptive statistics provided a summary of interval-scaled items, including maximum values, minimum values, means, standard deviations, and variance. These measures offered a clear overview of the data's characteristics. A Pearson correlation matrix was used to examine the direction, strength, and statistical significance of relationships between variables. This analysis helped understand patterns and associations but did not establish causation. Regression analysis assessed the impact of personal restraints, freelance market characteristics, technical knowledge, payment restraints, and social restraints on the adaptation of freelancing by state university students in Sri Lanka.

4. Results

4.1. Reliability

Reliability tests are employed to assess the consistency and stability of measurement instruments, ensuring that the results generated are dependable and reproducible. Cronbach's alpha value was used to assess the internal consistency of the data set. Table 1 shows the summary of reliability statistics for the independent variables (Personal restraints, Freelance market characteristics, Technical knowledge, Payment restraints, Social restraints) and the dependent variable (Adaptation of freelancing by state university students in Sri Lanka).

According to Table 1 below, Cronbach's alpha values for all variables ranged from 0.657 to 0.883, which meets the relevant accepted level of reliability. Cronbach's alpha values generally range between 0.6 and 1.0, with higher values indicating greater internal consistency. The table also shows that every question used to assess the independent and dependent factors was internally consistent.

Table 1. Reliability Test Summary

Variables	Cronbach's Alpha Value	No. of Items
Personal Restraints	0.712	5
Freelance Market Characteristics	0.742	4
Technical Knowledge	0.809	3
Payment Restraints	0.657	4
Social Restraints	0.850	5
Adaptation of Freelancing by State University Students	0.883	7

(Source: Reliability Test Results - SPSS)

4.2. Descriptive Analysis

Utilizing measures like mean and standard deviation, along with visual representations like histograms, it provides a clear overview of the data's characteristics. Descriptive analysis is foundational for understanding the basic features of a dataset before engaging in more advanced statistical analyses or hypothesis testing.

Table 2. Descriptive Analysis Results

	N	Mean	Std. Deviation	Skewness	
	Statistics	Statistics	Statistics	Statistics	Std. error
Personal Restraints	385	4.21	0.53	-1.54	.124
Freelance Market Characteristics	385	4.19	0.53	-1.34	.124
Technical Knowledge	385	4.35	0.62	-2.14	.124
payment Restraints	385	4.27	0.48	-1.33	.124
Social Restraints	385	4.09	0.64	-1.01	.124
Adaptation of Freelancing by State University Students	385	4.47	0.54	-1.79	.124

(Source: Descriptive Analysis Test Results - SPSS)

Based on the findings presented in Table 2, respondents exhibit a favorable attitude toward adapting to freelancing, as indicated by the mean value of 4.47 with a standard deviation of 0.54. However, it's noteworthy that the dependent variable (adaptation of freelancing) is negatively skewed, with a skewness of -1.79. The mean values of the independent variables range from 4.09 to 4.35, suggesting that respondents are mindful of factors such as Personal restraints, freelance market characteristics, technical knowledge, payment restraints, and social restraints when considering their adaptation to freelancing.

4.3. Correlation Analysis

A Pearson correlation matrix will provide insights into the direction, strength, and statistical significance of the relationships between various variables measured at an interval or ratio level. This correlation is determined by examining how one variable changes in relation to variations in another variable (Sekaran & Bougie, 2011). A coefficient of 1 signifies a perfect positive correlation, -1 indicates a perfect negative correlation, and 0 implies no linear correlation. This analysis aids in understanding patterns and associations between variables, though it does not establish causation.

According to the findings in Table 3, the Pearson correlation coefficient between personal restraints and the adaptation of freelancing is 0.603. This positive correlation suggests a meaningful association. The significance value remains 0.000, which is below 0.05, indicating statistical significance. Consequently, it can be statistically asserted that there is a significant and positive relationship between personal restraints and the adaptation of freelancing by State University students in Sri Lanka.

Also in Table 3, the Pearson correlation coefficient between freelance market characteristics and the adaptation of freelancing is 0.543, indicating a positive relationship. The significance value of 0.000, below 0.05, confirms statistical significance. Hence, it can be statistically affirmed that there is a significant and positive association between freelance market characteristics and the adaptation of freelancing among State University students in Sri Lanka.

The Pearson correlation value of freelance technical knowledge and adaptation of freelancing is 0.573, which implies that there is a positive relationship between technical knowledge and adaptation of freelancing. According to the same table data, the significant value is 0.000, hence both variables are significant at the 0.05 level. The relationship between the variables is significant. Therefore, it can be statistically said that there is a significant and positive relationship between technical knowledge and adaptation to freelancing by state university students in Sri Lanka.

Similarly, the Pearson correlation coefficient between payment restraints and the adaptation of freelancing is 0.534. The significance value remains 0.000, which is below 0.05, indicating statistical significance. Consequently, it can be statistically asserted that there is a

significant and positive relationship between payment restraints and the adaptation of freelancing by State University students in Sri Lanka.

The Pearson correlation value of social restraints and adaptation of freelancing is 0.103, which it implies that there is a positive relationship between social restraints and adaptation of freelancing. According to the same table data (Table 3), the significant value is 0.043, hence both variables are significant at the 0.05 level. The relationship between the variables is significant. Therefore, it can be statistically said that there is a significant and positive relationship between technical knowledge and adaptation to freelancing by state university students in Sri Lanka.

Table 3. Correlation Analysis Results

		PER	FM	TK	PR	SR	AF
Personal Restraints(PER)	Pearson Correlation Sig. (2-tailed)	1					
Freelance Market Characteristics (FM)	Pearson Correlation Sig. (2-tailed)	.788 .000	1				
Technical Knowledge (TK)	Pearson Correlation Sig. (2-tailed)	.659 .000	.580 .000	1			
Payment Restraints(PR)	Pearson Correlation Sig. (2-tailed)	.774 .000	.783 .000	.605 .000	1		
Social Restraints (SR)	Pearson Correlation Sig. (2-tailed)	.617 .000	.601 .000	.353 .000	.588 .000	1	
Adaptation of Freelancing (AF)	Pearson Correlation Sig. (2-tailed)	.603 .000	.543 .000	.573 .000	.534 .000	.103 .043	1

(Source: Correlation Analysis Test Results - SPSS)

4.4. Regression Analysis

Regression analysis is a statistical method that models and quantifies the relationship between a dependent variable and one or more independent variables.

Table 4. Regression Analysis (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.746 ^a	.557	.551	.35991

(Source: Regression Analysis Test Results - SPSS)

As per Table 4, the adjusted R^2 value, representing the proportion of total variation in the dependent variable explained by the independent variables, is 0.551. This suggests that approximately 55.1% of the variability in the adaptation to freelancing among university students can be accounted for by personal restraints, freelance market characteristics, technical knowledge, payment restraints, and social restraints. The remaining 44.9% represent

unexplained variations or factors specific to the study that influence university students' adaptation to freelancing.

Table 5. Regression Analysis (Coefficient table)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.652	.171		9.664	.000
Personal Restraints	.471	.067	.467	7.029	.000
Freelance Market Characteristics	.222	0.64	.220	3.494	.001
Technical Knowledge	.185	.041	.215	4.574	.000
payment Restraints	.172	.69	.154	2.491	.013
Social Restraints	-.401	.038	-.484	-10.596	.000

(Source: Regression Analysis Test Results - SPSS)

According to Table 5, the regression analysis reveals a positive impact of personal restraints on the adaptation of freelancing by State University students, as indicated by the regression coefficient (B value) of 0.471. The significant value of 0.000 confirms the statistical significance of this impact. This finding strongly supports the first hypothesis (H_1) of the study. Similarly, the above table (Table 5) indicates that the regression coefficient of freelance market characteristics also has a positive value, indicating that it has a positive impact on the adaptation of freelancing by state university students, as the B value is 0.222 and .001 significant value secure the significance of the aforesaid impact. This result further supports the second hypothesis (H_2) of the study.

The regression analysis reveals a positive impact of technical knowledge on the adaptation of freelancing by State University students, as indicated by the regression coefficient (B value) of 0.185. The significant value of .000 confirms the statistical significance of this impact. This finding strongly supports the third hypothesis (H_3) of the study, suggesting that a higher level of technical knowledge is associated with an increased inclination of university students towards freelancing adaptation.

Furthermore, Table 5 indicates that the regression coefficient of payment restraints also has a positive value, indicating that it has a positive impact on the adaptation of freelancing by state university students, as the B value is 0.172 and .013 significant value secures the significance of the aforesaid impact. This result further supports the fourth hypothesis (H_4) of the study. Lastly, the regression coefficient of social restraints indicates that it has a negative impact on the adaptation of freelancing by state university students, as the B value is -0.401, and the .000 significant value secures the significance of the aforesaid impact. The Pearson correlation value of social restraints and adaptation of freelancing is 0.103, which implies that there is a positive relationship between social restraints and adaptation of freelancing (see Table 3). Therefore, the fifth hypothesis (H_5) is supported.

Table 6. Summary of Hypotheses Testing

Hypothesis		Decision
H ₁	There is an impact of personal restraints on the adaptation of Freelancing by state university students in Sri Lanka.	Supported
H ₂	There is an impact of freelance market characteristics on the adaptation of freelancing by state university students in Sri Lanka.	Supported
H ₃	There is an impact of technical knowledge on the adaptation of freelancing by state university students in Sri Lanka.	Supported
H ₄	There is an impact of the payment restraints on the adaptation of freelancing by state university students in Sri Lanka.	Supported
H ₅	There is an impact of social restraints on the adaptation of freelancing by state university students in Sri Lanka.	Supported

(Source: Developed by Researcher)

5. Conclusions

This research initiated a comprehensive investigation into the factors influencing freelance adaptation by state university students in Sri Lanka. The study outlined the evolution of freelancing, the diverse categories of freelancers, and the transformative impact of digital entrepreneurship on the gig economy. By analyzing the freelance market both globally and in the Sri Lankan context, the research described the challenges and opportunities faced by freelancers in the country.

Key factors influencing the adaptation of freelancing were explored, including personal restraints, freelance market characteristics, technical knowledge, payment restraints, and social restraints. The findings revealed that these factors significantly impact the adaptation of freelancing by state university students in Sri Lanka. The study's results highlight a positive inclination among students towards freelancing adaptation, with significant relationships identified between the adaptation of freelancing and the aforementioned factors.

The research provides valuable insights for educational institutions, policymakers, and industry stakeholders. For educational institutions, integrating freelancing into the academic environment can offer students practical experience and financial independence. Specific initiatives could include offering freelancing courses, creating partnerships with freelancing platforms, and providing resources for students to develop their freelancing skills. Policymakers can use these insights to create supportive frameworks that address the identified restraints and promote freelancing as a viable career option. This could involve developing policies to improve digital infrastructure, offering incentives for freelancing, and ensuring secure payment systems. Industry stakeholders can leverage the findings to better understand the needs and challenges faced by student freelancers, thus tailoring their services and platforms to support this growing segment. For example, freelancing platforms can enhance their user interfaces to be more student-friendly and provide mentorship programs to guide novice freelancers.

Despite its contributions, this study has certain limitations. The cross-sectional design limits the ability to establish causality between the identified factors and freelancing adaptation. Future research could adopt a longitudinal approach to explore these relationships over time. Additionally, the study focused on a specific demographic group in Sri Lanka, which may limit the generalizability of the findings to other contexts. Future research could examine different populations or comparative studies across countries to enhance the understanding of freelancing adaptation in diverse settings.

In conclusion, this study contributes to the understanding of freelancing adaptation among state university students in Sri Lanka, offering a foundation for further research and practical interventions aimed at enhancing the freelancing landscape in the country. Future research could explore the long-term impacts of freelancing on students' career development and investigate additional factors that may influence freelancing adaptation, such as psychological traits and socio-economic background.

References

- Akhmetshin, E. M., Kovalenko, K. E., Mueller, J. E., Khakimov, A. K., Yumashev, A. V., & Khairullina, A. D. (2018). Freelancing as a type of entrepreneurship: Advantages, disadvantages, and development prospects. *Journal of Entrepreneurship Education*, 21(Special Issue 2).
- Amitha, W. A. K. (2018). Exporting services: Identifying freelancers as entrepreneurs to boom Sri Lankan economy. In *Proceedings of the 7th International Conference on Management and Economics* (pp. 1–14).
- Bloomenthal, A. (2022). What is business process outsourcing (BPO) and how does it work? Investopedia. Retrieved from <https://www.investopedia.com/terms/b/business-process-outsourcing.asp>
- Central Bank of Sri Lanka. (2020). Economic and social statistics of Sri Lanka 2020. Retrieved from https://www.cbsl.gov.lk/sites/default/files/cbslweb_documents/statistics/otherpub/ess_2020_e1.pdf
- Codagnone, C., Abadie, F., & Biagi, F. (2016). The future of work in the “sharing economy.” In *EU*. 37 (3).
- Department of Census and Statistics. (2021). Computer literacy statistics 2021 annual bulletin. Department of Census and Statistics, Ministry of Finance, Economic Stabilization, and National Policies. Retrieved from <http://www.statistics.gov.lk/ComputerLiteracy/StaticInformation/Bulletins/2021-Annual>
- Dosunmu, S. A., Ahoje, M. A., & Raji-lawal, H. Y. (2022). Freelancing among secondary school students in Lagos State: Rate, causative factors, and preventive measures. *Journal of Entrepreneurship Education*, 3, 21–35.

- Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being, and work-life balance. *New Technology, Work and Employment*, 32(3), 195–212.
- Freelance Platforms Market Share, Growth, Segmentation, Trends. (2023). Verified Market Research. Retrieved from <https://www.verifiedmarketresearch.com/product/freelance-platforms-market/>
- Freelance Platforms Market Size and Share [2023 Report]. (n.d.). Grandview Research. Retrieved September 16, 2023, from <https://www.grandviewresearch.com/industry-analysis/freelance-platforms-market-report>
- Galpaya, H., Perampalam, S., & Senanayake, L. (2018). Investigating the potential for micro-work and online freelancing in Sri Lanka. In *Digitized Labor: The Impact of the Internet on Employment* (pp. 229–250). Springer.
- Gavizon, V. (2019). What is a freelancer? 5 types of freelancers. *Workhoppers*. Retrieved from <https://www.workhoppers.com/blog/what-is-a-freelancer/>
- Hannák, A., Mislove, A., Wagner, C., Strohmaier, M., Garcia, D., & Wilson, C. (2017). Bias in online freelance marketplaces: Evidence from TaskRabbit and Fiverr. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work* (pp. 1914–1933).
- Huđek, I., Tominc, P., & Širec, K. (2020). Entrepreneurship vs. freelancing: What's the difference? *Naše Gospodarstvo/Our Economy*, 66(3), 56–62.
- Huđek, I., Tominc, P., & Širec, K. (2021). The impact of social and cultural norms, government programs, and digitalization as entrepreneurial environment factors on job and career satisfaction of freelancers. *Sustainability*, 13(2), 1–21.
- ICTA. (2020). Freelance Economy Program. Information and Communication Technology Agency of Sri Lanka. Retrieved from [ICTA website]
- Kuek, S. C., Paradi-Guilford, C., Fayomi, T., Imaizumi, S., Ipeirotis, P., Pina, P., & Singh, M. (2015). The global opportunity in online outsourcing. World Bank. Retrieved from <http://hdl.handle.net/10986/22284>
- Liaw, S. S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system. *Computers & Education*, 51(2), 864–873.
- Opait, G., Damian, D., & Capatina, A. (2019). Freelancer as an entrepreneur: A choice as career development. *Marketing and Management of Innovations*, 3, 327–340.
- Pandey, P., & Pandey, M. (2014). Research Methodology. Retrieved from http://studentsrepo.um.edu.my/4606/9/Chapter_5.pdf
- Perampalam, S., & Galpaya, H. (2016). Understanding the factors influencing the take-off of online freelancing in Sri Lanka. In *Proceedings of the 22nd Biennial Conference of the International Telecommunications Society*.
- Raquel, S. (2021). The history of freelancing. *Sophical Content*. Retrieved from <https://sophicalcontent.com/history-of-freelancing/>
- Report: Freelancing and the Economy in 2019 | Upwork. (n.d.). Retrieved September 9, 2023, from <https://www.upwork.com/press/releases/freelancing-and-the-economy-in-2019>

- Rosenblum, N. L. (2018). Freelancing in America 2018. Freelancers Union. Retrieved from <https://www.freelancersunion.org/resources/freelancing-in-america/>
- Sekaran, U., & Bougie, R. (2011). Research Methods for Business: A Skill Building Approach. John Wiley & Sons.
- Senanayake, L., Samarajiva, R., Perampalam, S., & Galpaya, H. (2018). Online freelancing as an interim solution to youth unemployment problem with particular relevance to the Northern Province. In Proceedings of the 22nd Biennial Conference of the International Telecommunications Society.
- Seneviratne, R.T., & Lanka, S. (2016). Identification of business discouragements on freelance IT in Sri Lanka: Statistical approach. Journal of Business Discouragements, May.
- Viduranga, & Jayarathna. (2020). Determinants of freelancing intention of undergraduates: Evidence from universities in Western Province of Sri Lanka.