Self-employment Intention and Behavior: An Investigation of Determinants and the Moderating Role of Intrinsic Motivation

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ABSTRACT

The main purpose of the present study is to examine the determinants of self-employment intention and investigate the moderating role of intrinsic motivation in the effect of self-employment intention on self-employment behavior by using the theory of planned behavior. A questionnaire survey was conducted among 350 public-and private-university students from Lahore, Pakistan. Data was analyzed using SmartPLS. The findings indicate that students' attitudes, social norms, and perceived behavioral control have strong direct impacts on self-employment intention. Students' behavior is directly affected by their intention for self-employment and is moderated by intrinsic motivation such that a positive relationship is stronger when intrinsic motivation is higher. There is a dire need to establish a linkage between higher education institutes, industry, and government to boost entrepreneurial activities, as related policies can contribute to the local market and economy of Pakistan. Training and educational programs related to self-employment are needed to be designed so that they can influence the attitude and intrinsic motivation of youngsters. Future studies can take cultural and socio-economic factors into account, as well as the role of extrinsic motivation to get a deeper insight into this concept.

Keywords: Self-employment, Theory of planned behavior, Self-determination theory, Intrinsic motivation.

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نية العمل الحر وسلوكياته: استنتاج المحددات والدور المعدِّل للدوافع الذاتية

عمير وقاص 1 ، سونيا عمير 2 ، ابراهيم راشد الشامسي 3 ، حيدر كامران 4 ، ايليا بايستروف 5

ملخص

الهدف الرئيسي من هذه الدراسة هو البحث في محددات نية العمل الحر ودراسة تأثير الدوافع الذاتية في العلاقة بين نية العمل الحر وسلوكيات العمل الحر باستخدام نظرية السلوك المخطط. تم تطبيق استبانة على 350 طالباً وطالبة من الجامعات الحكومية والخاصة في مدينة لاهور، باكستان. وتم تحليل البيانات باستخدام SmartPLS. وتشير نتائج الاستبانة إلى إن اتجاهات الطلاب والأعراف الاجتماعية والسيطرة السلوكية المحسوسة لها تأثير قوي ومباشر على نوايا العمل الحر. ويتأثر سلوك الطلاب بشكل مباشر بنيتهم في العمل لحسابهم الخاص، ويتأثر هذا السلوك بالدوافع الداخلية بحيث تكون العلاقة الإيجابية أقوى عندما يكون الدافع الداخلي أعلى. وهناك حاجة ماسة إلى ربط مؤسسات التعليم العالي بسوق العمل والحكومة لتعزيز أنشطة ريادة الأعمال، حيث يمكن للسياسات ذات الصلة أن تساهم بشكل مباشر في السوق المحلي في باكستان واقتصادها. كذلك فإن هناك حاجة إلى برامج تدريبية وتعليمية تتعلق بالعمل الحر للتأثير على اتجاهات الشباب ودوافعهم الذاتية. ويمكن للدراسات المستقبلية دراسة العوامل الثقافية والاجتماعية والاقتصادية، وكذلك دور الدوافع الخارجية للحصول على نظرة أعمق لهذا المفهوم.

الكلمات الدالة: التوظيف الذاتي، نظرية السلوك المخطط، نظرية تقرير المصير، الدافع الذاتي.

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1. INTRODUCTION

Around the world, the unemployment rate among highlyeducated people is relatively high as compared to lesseducated ones (Al-Qadasi et al., 2021). Creating jobs, especially during and after a pandemic, is a big challenge for the economies of countries. Engaging university graduates towards self-employment can make a difference to reduce the unemployment rate. It is crucial to engage young people and encourage them to be future entrepreneurs. Many universities are now trying to take practical measures to apply the concept of entrepreneurship by establishing centers for entrepreneurship within universities (Al-Rawadiah, 2022). Importantly, the intention to be an entrepreneur begins before starting a business. It is observed that there is a strong link between a person's intention and decision (Mei et al., 2016). The decision of being self-employed depends on many factors, including motivational factors, positive attitude, and social pressure (Melhem & Al-Shaikh, 2018). These factors can help attract and encourage the youth to have their own businesses. Therefore, understanding the attitudes, motivations, and behaviors of graduates toward self-employment should be key while designing programs for facilitating self-employment. The focus should remain on examining the factors that can influence the youth to be selfemployed in the future, as these factors can assist policymakers to recognize and target those policies that can foster self-employment and can successfully integrate them into the labor market. Importantly, such factors can vary according to our societies, cultures, and even individual perceptions (Al-Qadasi et al., 2021). Thus, it is critical to have empirical data and analysis to determine the attitude and motivation of youth, specific to each country. In previous research, the Theory of Planned Behavior (TPB) was used (Ajzen, 1991) to explain an individual's selfemployment intention. It provided valuable contributions, yet the studies mostly didn't explain the actual behavior of such intentions (Otache et al., 2020; Soomro et al., 2018; Zulfiqar et al., 2017). Importantly, there is a gap between the

intention for self-employment and starting one's business. The intention-based models including TPB do not explicitly indicate why people want to be entrepreneurs (Al-Jubari, 2019). It was argued that TPB can be a vehicle to understand behavior, as it has a predominantly external focus (Leavell, 2016) and is not sufficient to predict and explain human behaviors. There is also a need for other motivational factors to examine and explain human intentions and behaviors (Chatzisarantis et al., 2006). Thus, to complement TPB, researchers attempted to integrate it with the Self-determination Theory (Al-Jubari, 2019). It was found that intentions capture motivational factors which influence the behavior of a person, indicating the relationship between motivation and behavioral intention (Hsu & Huang, 2010). Intrinsic motivation is vital to perform and get success in both the short run and the long run. People get engaged in a behavior for their own sake, interest and the pleasure that they feel while performing that activity (Chatzisarantis et al., 2006). This intrinsic motivation can be considered as a key to decide about one's career (Bögenhold, 2019). People get interested or enjoy performing something when they are intrinsically motivated. Despite this relevance, little attention has been paid to explore the relationship between intrinsic motivation and the components of TPB, particularly in entrepreneurship research. Therefore, this study seeks to fill this research gap by integrating intrinsinc motivation and TPB to better understand the self-employment intention and behavior of the youth. On the basis of TPB and Self-determination Theory (SDT), the present study examines the attitude towards self-employment, social norms, and PBC towards intention to selfemployment with the moderating role of intrinsic motivation between self-employment intention and actual behavior.

The next part of the paper explains the literature review and theoretical framework. After that comes the methodology part which details the data collection method, measurements, data analysis approach, and results of the developed hypotheses. Then, the theoretical and practical implications of the study are discussed. Finally, the limitations and future research recommendations are provided.

Literature Review and Theoretical Framework

The present study conceptualized self-employment intention as individuals' willingness to start their businesses after graduation. For this aim, Ajzen's Theory of Planned Behavior (Ajzen, 1991) is considered a multi-dimensional and one of the most influential models to predict one's intention. This model (Figure 1) is the base for the present study. There are three main factors in TPB named attitude, social norms, and perceived behavioral control (PBC) and these factors measure a person's intention. In the present study, TPB was used to understand how an individual's attitude, social norms which involve the social pressure of family, friends, or close ones, and his/her perceived behavioral control (PBC) lead toward the intention for self-employment.

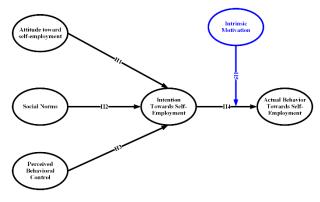


Figure (1)
Conceptual model

Antecedents to Self-employment Intention

Attitude: According to the TPB, the attitude of an individual can be determined by behavioral beliefs (Ajzen, 1991). It can refer to the degree to which a person evaluates

a behavior as favorable or unfavorable (Joensuu-Salo et al., 2015). It is vital to understand the attitude, as it determines the actual behavior of an individual. For self-employment, individuals who have a mindset for their own businesses and a positive attitude are expected to have self-employment intentions as well (Zaman et al., 2021). We can assume that the more positive a person's perception of the outcome of self-employment, the more favorable his/her attitude toward it and the stronger the intention to start a business.

Social Norms: TPB also posits that social norms, which can be social pressures and influences, determine a person's intention (Ajzen, 1991) and the same can be assumed for the intention to become selfemployed. Such norms are considered to be unwritten rules and regulations embedded in groups and such groups are expected to shape their behaviors according to those rules and regulations (Zulfiqar et al., 2017). Social norms or beliefs, can impact a person's entrepreneurial activities and based on such beliefs, a person can make a decision. These norms are not only based on the belief that if the important referent persons or groups like or dislike the idea of establishing a business, but also to what extent this matters to the individual (Joensuu-Salo et al., 2015). We can assume that if the opinion of a referent group or individuals matters to a person and their opinions encourage him/her to start a business, the stronger will be the person's intention to start that business. For the present study, we assume that social norms will positively influence self-employment intention.

PBC: As per TPB, PBC can be an individual's beliefs or opinion about himself/herself that he/she has control over his/her actions, and performing such actions depends on the amount of control he/she has for that action (Ajzen, 1991). PBC is considered to be dependent on a person's beliefs regarding the impact of internal and situational factors and can improve the

performance of a specific behavior (Ali et al., 2019). In previous works, the importance of PBC towards entrepreneurial intention was argued (Zulfiqar et al., 2017). For self-employment, PBC can be a person's confidence and belief to bear the risk of starting a business, its continuity, and innovation (Soomro et al., 2018). When a person has more control to start a business, there are chances that he/she will start his/her business after graduation.

From this discussion, it is hypothesized that:

- H1: Attitude has a direct and positive effect on selfemployment intention.
- H2: Social norms have a positive and direct effect on selfemployment intention.
- H3: PBC has a positive and significant effect on selfemployment intention.

Self-employment Intention and Self-employment Actual Behavior

According to TPB, intention can be an individual's willingness to perform a certain behavior and can produce the actual behavior (Ajzen, 1991). Behavioral intention is considered to be the predictor of actual behaviors in different sectors, including health, technology, tourism, and many other domains (Zaman et al., 2021). The stronger the intention of an individual toward a specific behavior, the more likely the individual would be engaged in actual behavior. Thus, self-employment intention is considered to be a state of mind that can direct and guide a person's action toward having a business in the future or an inclination to pursue a self-employment career (Otache et al., 2020). For the present study, self-employment intention is the commitment to start a new business (Joensuu-Salo et al., 2015). Using TPB was dealt with adequately to understand the relationships of attitude, social norms, and PBC with intention, but whether an intention converts into actual behavior is a less researched area (Hsu & Huang, 2010; Kolvereid, 2016). For the present study, it is assumed that intention would self-employment influence employment behavior significantly and positively. Drawing up the previous literature, we hypothesize that:

H4: Self-employment intention has a positive effect on self-employment behavior.

The Moderating Role of Intrinsic Motivation

Deci and Ryan (1985) introduced the Selfdetermination Theory (SDT) to present a personality and human need approach to motivation. Intrinsic and extrinsic motivations were integral components of this theory. Intrinsic motivation can be an innate inclination to improve a person's capacity, to seek something new or challenging, and to explore and learn (Çetin & Aşkun, 2018). It is found that people engage themselves in an activity for several reasons. However, most people perform actions for self-determined reasons particularly intrinsic motivation (Hollembeak & Amorose, 2005). This motivation can be considered as a person's satisfaction by doing that activity or work. People with high intrinsic motivation can be considered to participate and work hard to perform an activity and exhibit more goal attainment as compared to less intrinsically motivated people (Tu & Lu, 2016). Motivation can help improve the positive outcomes to perform an activity (Klaeijsen et al., 2018). For this study, our main focus is to understand the attainment of the purpose and not the intention only. In other words, we can suppose that those who intend to have their future business and are intrinsically motivated would be more inclined to start their businesses after their graduation. Intrinsic motivation will augment the effect of self-employment intention on actual behavior. Therefore, we propose the following hypothesis:

H5: Intrinsic motivation moderates the relationship between self-employment intention and behavior such that a positive relationship is stronger when intrinsic motivation is higher.

This part of the study discussed the literature review and the conceptual framework development based on the theories and gaps from previous studies. The research framework was tested with an appropriate methodology, which is discussed in the next part.

Research Methodology

For this study, a cross-sectional survey was conducted among 350 final year students from the Business Department of two universities in Lahore, Pakistan. The questionnaires were self-administered. Brief instructions on how to answer the questions and a scale summary were presented after the introduction. Due to privacy issues, the names of the universities are kept confidential. The reason for studying the attitudes and intentions of final-year students was to ensure that they have studied the courses related to entrepreneurship. Being final year students, it was also expected that they would have made up their minds regarding their careers. Participation in the survey was voluntary.

Measures

All scales followed a seven-point (1-7) Likert-type format, with one indicating strongly disagree and seven reflecting strongly agree, unless otherwise indicated. The seven-point Likert scale responses were based on the likelihood continuum, comprising: "1-strongly disagree", "2-disagree", "3-somewhat disagree", "4-neutral/not decided", somewhat agreed", "6-agree", "7-strongly agree" (Vagias, 2006). Self-employment intention was measured using a 4item scale. Attitude towards self-employment was measured using 4 dimensions, including attitude toward earning money, attitude toward personal satisfaction as an entrepreneur, attitude toward personal quality of life, and attitude toward the desire for independence (autonomy). Three dimensions (attitude toward earning money, attitude toward personal quality of life, and attitude toward the desire for independence were measured using a 4-item scale for each of them, while attitude toward personal satisfaction as an entrepreneur was measured by adopting a 3-items scale. Social norms were measured by adopting a 5-item scale and PBC was measured

by adopting a 7-item scale. All these scales were adapted from the work of Al-Qadasi et al. (2021). The intrinsic motivation was measured by using a 6-item scale from the work done by Kuvaas & Dysvik (2010). The actual behavior for self-employment was measured by adapting a 3-item scale from the work done by Si et al. (2020). Some of the items used were, "It is important for me to make a lot of money", "To me, becoming an entrepreneur/self-employed is to achieve a higher position for myself in society", "Being entrepreneur/self-employed implies improving my quality of life", "I prefer to be an entrepreneur/selfemployed to be able to choose my own work tasks", "My family would approve my decision to be an entrepreneur/self-employed", "I can control the creation process of a new business" and "My job is so interesting that it is a motivation in itself".

Data Analysis and Results Demographics

For the present study, 350 questionnaires were distributed, and 321 proved useful after eliminating the incomplete ones. Demographic statistics of the study indicated that 64% of students were males and the remaining 36% were females in this study. Also, 82% of the students were aged between 20 and 25 years, and the remaining 18% were above 25 years.

Common Method Bias (CMB)

To ensure that data for analysis did not suffer from common method bias (CMB), Harman's single-factor test (Podsakoff et al., 2003) was performed using SPSS and the largest variance explained by the first factor was 28.07% which was less than 40%, indicating that CMB was not an issue in the present study.

Results

For the present study, partial least squares structural equation modeling (PLS-SEM) using

SmartPLS (3.0) software was utilized to test the developed hypotheses.

Measurement Model

In the present study, all the items were reflective and the measurement model for those items was analyzed. Cronbach's alphas and composite reliability for all the constructs were above the threshold value of 0.7 (Hair et al., 2014). AVE values for all the constructs were greater than

the threshold value of 0.5 (Hair et al., 2014), which meant that all the items were loaded to the respective constructs and explained more than 50% of the constructs' variance. Only the loadings that exceed the recommended value were retained and the results indicated that all the proposed constructs met the requirements of reliability and convergent validity (Table 1).

Table 1
Reliability and validity

Item Code	Factor Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	VIF			
Actual behavio	or for self-emplo	yment	-		· ·			
ABSE1	0.754				1.151			
ABSE2	0.810	0.712	0.837	0.631	1.961			
ABSE3	0.818				1.950			
Attitude towar	d self-employme	ent						
ATSE1	0.725				2.326			
ATSE2	0.661		0.925		2.065			
ATSE3	0.682				2.006			
ATSE4	0.758				2.180			
ATSE5	0.708			0.507	1.961			
ATSE6	0.776				2.514			
ATSE7	0.773	0.911			2.942			
ATSE8	0.751				2.683			
ATSE9	0.747				2.681			
ATSE10	0.632				2.479			
ATSE11	0.673				2.270			
ATSE12	0.641				2.277			
Intrinsic Motiv	vation							
IM1	0.862		0.931		2.197			
IM2	0.805				3.057			
IM3	0.893	0.921		0.729	3.143			
IM4	0.816				3.322			
IM5	0.890				2.947			
Intention towa	rd self-employm	ent						
ITSE1	0.786	0.861	0.905	0.705	1.873			

ITSE2	0.880				2.481
ITSE3	0.849				2.325
ITSE4	0.841				2.060
Perceived Beh	avioral Control (PBC)			
PBC1	0.817	0.846	0.887		2.251
PBC2	0.428				1.272
PBC3	0.845			0.577	3.104
PBC4	0.884			0.577	3.172
PBC5	0.828				2.529
PBC6	0.658				1.289
Social Norms					
SN1	0.761	0.823	0.872		2.793
SN2	0.770			0.576	3.725
SN3	0.772				3.518
SN4	0.721				1.837
SN5	0.769				1.929

Discriminant validity was also assessed using the Heterotrait-Monotrait ratio (HTMT) (Henseler et al., 2016). All the values of HTMT were <0.90 (Table 2), which

indicates that all constructs exhibited sufficient discriminant validity.

Table 2
Discriminant validity (HTMT ratio)

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Attitude toward self-employment						
(2) Intention toward self-employment	0.628					
(3) Intrinsic Motivation	0.066	0.046				
(4) Perceived Behavioral Control	0.566	0.617	0.066			
(5) Social Norms	0.621	0.694	0.045	0.644		
(6) Actual behavior for self-employment	0.549	0.534	0.082	0.505	0.536	

Structural Model Results

After the measurement model, the assessment of the structural model was performed. The assessment of path coefficients was used to evaluate the significance of hypothesized relationship among the constructs. Table 3 shows that all four direct relationships were significant. The hypothesis (H5) for the moderating effect of intrinsic motivation was also significant.

Hypothesis	Relationship Statements		Standard Deviation	T-statistic	P-value
H1	Attitude toward self-employment → Intention toward self-employment	0.250	0.105	2.383	0.017**
H2	Social Norms → Intention toward self-employment	0.349	0.089	3.907	0.000***
Н3	Perceived Behavioral Control → Intention toward self-employment	0.222	0.086	2.588	0.010***
H4	Intention towards Self-employment → Actual behavior for self-employment	0.471	0.075	6.247	0.000***
Н5	IM*ITSE → Actual behavior for self-employment	0.214	0.095	2.251	0.024**

Table 3
Hypothesis testing (bootstrapping @5000 subsamples)

The coefficient of determination (R²) was assessed. The R² value of 0.482 for intention toward self-employment indicates that the antecedent variables (attitude, social norms, and PBC) account for 48.20% of the variance in intention. The R² value of 0.242 of behavior for self-employment shows that a percentage of 24.2% of the variance in actual behavior for self-employment was explained by intention for self-employment. As a rule of thumb, the R² value of 0.26, 0.13, and 0.02 can be described as substantial, moderate, and weak, respectively (Cohen, 1988). Thus, we can assume that the relationships between endogenous constructs and their respective exogenous constructs are substantial and moderate.

In the end, predictive relevance (Q²) was assessed using the blindfolding procedure. This procedure is used to analyze the predictive relevance and power of the model (Geisser, 1974). All the endogenous constructs had Q² values above zero, thus verifying the predictive relevance and validity of the model.

Implications of the Study

For the accomplishment of a career and to look for selfemployment options, it is important to investigate the intentions and behaviors of individuals. For this, the findings of this study have provided some insights into the intentions and behaviors of the students for self-employment.

Theoretical Implications

It is of profound importance for academicians and policymakers to understand motivation and to promote self-employment behavior among university students. The present study was an attempt to look at certain determinants of self-employment intention and behavior of university students using well-established motivational and cognitive intentional theories: TPB and SDT. The results highlight the importance of the comprehensive model of TPB to better understand the behavior rather than just taking intention only. They can help understand that university students not only have the intention, but are also willing to start businesses after their studies which is consistent with previous work (Joensuu-Salo et al., 2015). The results are in accordance with those of previous results, where it was found that when students are being supported by their social environment, they are internally motivated to be self-employed and they believe that they are contributing towards family, friends, colleagues, and others (Al-Jubari, 2019). All the tested antecedents for this study are significant and are consistent with prior research (Otache et al., 2020; Soomro et al., 2018; Zaman et al., 2021). The direct effects of attitude, social norms, and PBC towards the intention to be selfemployed confirm the applicability of TPB in selfemployment research. Importantly, the results of this study also confirmed the findings of previous work indicating that intention measures predict self-employment behaviour (Joensuu-Salo et al., 2020).

Another contribution of the study is to extend the TPB. Previously, it was argued that TPB has dealt greatly with the relationships of attitude, social norms, and PBC with intention, but there is a lack of understanding of how intention can be actualized as behavior (Hsu & Huang, 2010). Theoretically, the findings of the study support the integration of TPB and STD, where intrinsic motivation is related to students' intention and actual behavior toward self-employment. This study attempted to establish the relationships between intention, actual behavior, and intrinsic motivation. The results complement the previous findings indicating that motivation helps influence behaviour (Klaeijsen et al., 2018). It is clearly shown that intrinsic motivation can have an important role in transforming intention into actual behaviour.

Practical Implications

The participants of the study are final-year students who are supposed to decide on their careers. Based on the results of the study, it can be assumed that they are inclined towards starting their businesses and that they view self-employment as favorable for them in the future. The implication here is that the more they want to be self-employed, the more likely they will start their businesses. This will help get general positive outcomes including more income, employment opportunities for others, and overall improvement in the economy of a country. For this, knowledge and education are two important aspects to create awareness, change attitudes, and finally impact the behavior for self-employment. There is a dire need to establish a linkage between higher education institutes, industry, and government to boost entrepreneurial activities as related policies can directly contribute to the local market and economy of Pakistan. Training and educational programs related to self-employment are needed to influence the attitude and intrinsic motivation of youngsters. The results of the present study should be a concern to policymakers, particularly in those countries where the preference for self-employment is low among the population.

The significance of social norms and PBC towards intention and then intention towards behavior indicates that students have confidence in their capabilities. They get influenced by their cultural and social values, and they want to have their businesses after their graduation. Particularly, in a country like Pakistan, there are great opportunities for self-employed people to be successful due to the country's factor-driven economy (Zulfigar et al., 2017). Social environment including universities can play a significant role to motivate students for self-employment, where the role of instructors is particularly crucial to provide support to the students (Al-Jubari, 2019). Thus, universities and specifically business schools should offer such courses and workshops to their students, which can help them gain confidence to start and run their businesses in the future. The present study was an attempt to enrich the TPB by empirically proving the moderating role of intrinsic motivation between intention and behavior toward self-employment. Based on intrinsic motivation, people can build a certain set of skills that can enhance their decision-making process (Syed et al., 2021). For this, we can assume that when students are internally motivated, they will be more interested to have their own businesses after their studies.

Hence, the main emphasis of universities should remain on offering an innovative environment to the students where they can learn to solve real-world problems, resource allocation, team building, and even pressure handling. The Ministry of Education should focus on the important role of self-worth in the early career development of business graduates (Long & Fynn, 2018) and should encourage institutes to start entrepreneurial education at the school level. Also, the

government should sponsor new ideas and business plans. Such opportunities can help increase productivity and decrease unemployment rate in Pakistan.

Limitations and Future-research Suggestions

Despite its theoretical and practical implications, this study has some limitations worth mentioning. Initially, the sample was limited to the universities of Lahore and the results cannot be generalized to other countries and cultures. The targeted population of this research was also limited, since it was based on business students exclusively. Students from other specializations are believed to provide a more representative sample that could have given a more inclusive understating of the nature of effects among the research variables, from the perspective of a more diverse sample. The recommendation here is to conduct other more inclusive surveys with the representation of university students in their fourth year of study, as well as postgraduate students, from a variety of specializations and/or schools and/or universities and/or cities. Additionally, this study only assumed factors of TPB along with intrinsic motivation. Future studies can take cultural and socio-economic factors into account, as well as the role of extrinsic motivation to get a deeper insight into this concept.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211. https://doi.org/10.1016/0749-5978(91) 90020-T
- Ali, S., Ullah, H., Akbar, M., Akhtar, W., & Zahid, H. (2019). Determinants of consumer intentions to purchase energy-saving household products in Pakistan. *Sustainability*, 11 (5), 1462. https://doi.org/10.3390/su11051462
- Al-Jubari, I. (2019). College students' entrepreneurial intention:
 Testing an integrated model of SDT and TPB. SAGE Open,
 9 (2), 1-15. https://doi.org/10.1177/2158244019843728
 Al-Qadasi, N., Zhang, G., & Al-Jubari, I. (2021). Attitude of

Conclusion

Nowadays, the desire to be self-employed is increasing due to certain factors including job uncertainty, career accomplishment, and self-identity. Thus, it is imperative to investigate students' intention to get maximum output. The present study attempted to investigate the behavior of university students toward self-employment and the overall results suggested that business students in Pakistan have a positive attitude toward self-employment and have the intention to have their businesses. The results show that self-employment can be one of the solutions to the overgrowing unemployment rate in Pakistan and other developing countries. The emphasis should be on how policymakers can create opportunities for young people to find employment for themselves. The government, parents, and other stakeholders should work together toward fostering an entrepreneurial mindset among young people and establishing youth networks nationwide.

Conflict of Interests

The authors have no conflict of interests to dectare.

- youth towards self-employment: Evidence from university students in Yemen. *PLoS ONE*, *16* (9), e0257358. https://doi.org/10.1371/journal.pone.0257 358
- Al-Rawadiah, W.E. (2022). Investigating the effect of entrepreneurial orientation of Jordanian higher education institutions on customer orientation. *Jordan Journal of Business Administration*, 18 (2), 163-187. https://doi.org/10.31039/jjba.2022.18.2.4
- Bögenhold, D. (2019). From hybrid entrepreneurs to entrepreneurial billionaires: Observations on the

- socioeconomic heterogeneity of self-employment. American Behavioral Scientist, 63 (2), 129-146. https://doi.org/10.1177/0002764218810885
- Çetin, F., & Aşkun, D. (2018). The effect of occupational self-efficacy on work performance through intrinsic work motivation. *Management Research Review*, 41 (2), 186-201. https://doi.org/10.1108/MRR-08-2016-0165
- Chatzisarantis, N.L.D., Hagger, M.S., Smith, B., & Sage, L.D. (2006). The influence of intrinsic motivation on execution of social behaviour within the theory of planned behaviour. *European Journal of Social Psychology*, 36 (2), 229-237. https://doi.org/10.1002/ejsp.292
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd edn.). Erlbaum.
- Deci, E.L., & Ryan, R.M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19 (2), 109-134. https://doi.org/10.1016/0092-6566 (85)90023-6
- Geisser, S. (1974). Effect to the random model: A predictive approach. *Biometrika*, 61 (1), 101-107.
- Hair Jr, J.F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V.G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26 (2), 106-121. https://doi.org/10.1108/EBR-10-2013-0128
- Henseler, J., Hubona, G., & Ray, P.A. (2016). Using PLS path modeling in new technology research: Updated guidelines. Industrial Management & Data Systems, 116 (1), 2-20.
- Hollembeak, J., & Amorose, A.J. (2005). Perceived coaching behaviors and college athletes' intrinsic motivation: A test of self-determination theory. *Journal of Applied Sport Psychology*, 17 (1), 20-36.
- Hsu, C.H.C., & Huang, S. (2010). Formation of tourist behavioral intention and actual behavior. In: *Proceedings of the 7th International Conference on Service Systems and Service Management (ICSSSM)* (pp. 1-6). IEEE. Tokyo, Japan.
- Joensuu-Salo, S., Varamäki, E., & Viljamaa, A. (2015). Beyond intentions: What makes a student start a firm? *Education* + *Training*, *57* (8/9), 853-873.

- Joensuu-Salo, S., Viljamaa, A., & Varamäki, E. (2020).

 Do intentions ever die? The temporal stability of entrepreneurial intention and link to behavior. *Education + Training*, 62 (3), 325-338.
- Klaeijsen, A., Vermeulen, M., & Martens, R. (2018). Teachers' innovative behaviour: The importance of basic psychological need satisfaction, intrinsic motivation, and occupational self-efficacy. Scandinavian Journal of Educational Research, 62 (5), 769-782.
- Kolvereid, L. (2016). Preference for self-employment: Prediction of new business start-up intentions and efforts. *International Journal of Entrepreneurship and Innovation*, 17 (2), 100-109.
- Kuvaas, B., & Dysvik, A. (2010). Does best practice HRM only work for intrinsically motivated employees? *International Journal of Human Resource Management*, 21 (13), 2339-2357. https://doi.org/10.1080/09585192.2010.523648
- Leavell, J. P. (2016). Controlling and informational planned behavior: Self-determination theory and the theory of planned behavior. *Atlantic Marketing Journal*, 5 (3), 165-187. https://doi.org/10.3776/amj.2016.0165
- Long, E., & Fynn, A. (2018). Postgraduate student experiences of workplace learning for a professional psychology qualification in the South African context. *Industry and Higher Education*, 32 (5), 341-350. https://doi.org/10.1177/0950422218790474
- Mei, H., Zhan, Z., Fong, P.S. W., Liang, T., & Ma, Z. (2016). Planned behaviour of tourism students' entrepreneurial intentions in China. *Applied Economics*, 48 (13), 1240-1254. https://doi.org/10.1080/00036846.2015.1091414
- Melhem, Y., & Al-Shaikh, F.N. (2018). Exploring entrepreneurial intention among university students at Yarmouk University in Jordan. *Jordan Journal of Business Administration*, 14 (4), 625-639. https://doi.org/10.31028/jjba/2018.v14n4a3

- Otache, I., Oluwade, D.O., & Idoko, E.O.J. (2020). Entrepreneurship education and undergraduate students' self-employment intentions: Do paid employment intentions matter? *Education + Training*, 62 (7-8), 741-757. https://doi.org/10.1108/ET-04-2020-0057
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88 (5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879
- Si, H., Shi, J., Tang, D., Wu, G., & Lan, J. (2020). Understanding intention and behavior toward sustainable usage of bike sharing by extending the theory of planned behavior. *Resources, Conservation and Recycling*, 152, 104513. https://doi.org/10.1016/j.resconrec.2019.104513
- Soomro, B. A., Shah, N., & Memon, M. (2018). Robustness of the theory of planned behavior (TPB): A comparative study between Pakistan and Thailand. Academy of Entrepreneurship Journal, 24 (3), 1-18.
- Syed, S., Shah, S., & Ahmad, F. (2021). The influence of intrinsic motivational forces on consumers' product purchase intentions. *Journal of Mediterranean Tourism Research*, 1 (2), 70-80.

- Tu, Y., & Lu, X. (2016). Do ethical leaders give followers the confidence to go the extra mile? The moderating role of intrinsic motivation. *Journal of Business Ethics*, 135 (1), 129-144. https://doi.org/10.1007/s10551-014-2445-7
- Vagias, W. M. (2006). *Likert-type scale response* anchors. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management, Clemson University. http://www.clemson.edu/centers-institutes/tourism/research.html
- Zaman, U., Zahid, H., Aktan, M., Raza, S., & Sidiki, S.N. (2021). Predictors of self-employment behavior among business graduates. *Cogent Business & Management*, 8 (1). https://doi.org/10.1080/23311975.2021.1950544
- Zulfiqar, S., Asmi, F., Chandia, K.E., Sarwar, B., & Aziz, S. (2017). Measuring entrepreneurial readiness among youth in Pakistan through theory of planned behavior (TPB)-based approach. *Business and Economic Research*, 7 (1), 149. https://doi.org/10.5296/ber.v7i1.10040