The Effect of Entrepreneurial Education and Culture on Entrepreneurial Intention

Hiba KAYED, Amro AL-MADADHA, Abdelraheem ABUALBASAL

Princess Sumaya University for Technology, Department of Business Administration, Amman, Jordan, hiba.kayed96@gmail.com, a.almadadha@psut.edu.jo, a.abualbasal@psut.edu.jo

Background/Purpose: Entrepreneurial education can have a positive effect on entrepreneurial intention of university students, yet universities in Jordan still do not direct their attention to invest in Entrepreneurial education. This study aims to investigate the effect of entrepreneurial education and Culture on entrepreneurial intention through psychological empowerment of university students.

Methodology: A questionnaire was distributed to a sample of 220 university students in Jordan who take any course in entrepreneurship. Data were analysed and hypotheses were tested through Structural Equation Modelling (SEM) using Statistical Package for Social Sciences (SPSS).

Results: The analysis of the study showed that; entrepreneurial education has a significant influence on psychological empowerment, psychological empowerment has a significant influence on entrepreneurial intentions, culture has a significant influence on psychological empowerment, entrepreneurial education has a significant influence on entrepreneurial intention and culture has a significant influence on entrepreneurial intention. The results of the study answer the calls of previous research to examine the role of culture and psychological empowerment in entrepreneurial education to affect entrepreneurial intention.

Conclusion: Universities in Jordan should focus more on entrepreneurial education by psychologically empowering students to increase their intentions towards entrepreneurship. This study contributes to the existing literature by providing a better understanding of the relationship between entrepreneurial education and entrepreneurial intention through culture and psychological empowerment.

Keywords: Entrepreneurship, Entrepreneurial education, Entrepreneurial intention, Culture, Psychological empowerment

1 Introduction

New venture’s creation plays a vital role in global economies since it decreases unemployment levels and provides revenue for countries. Henceforth, the degree to which a country has the capability to perform innovatively is related to the presence of entrepreneurial activity (Piperopoulos, 2012). Worldwide there is an increasing problem of unemployment for graduating students as it has been shown that entrepreneurship can be the strategic option to solve this problem. Recently, Entrepreneurship has proven to be a crucial element of revolution of the brand-new international economy especially during the challenges of high unemployment rates which lead economies especially students to engage more in entrepreneurial activities (Anwar & Abdullah, 2021).

It is important to focus on entrepreneurial education for university students since it provides them with the needed knowledge and skills and encourage them to change their beliefs and attitudes towards starting their own businesses by giving them the needed knowledge and skills to become entrepreneurs (Raposo & do Paço, 2011). Entrepreneurship has proved to be a solution for economic downturns, especially the current COVID-19 crisis that the world is facing which calls for increasing the concern of entrepreneurial education and creating the entrepreneurship mindset for students (Maritz et al., 2020).

Furthermore, focusing on encouraging and psychologically empowering individuals are important elements to reach entrepreneurial intentions, by eliminating direct and
indirect obstacles which include the intangible obstacles inside individuals to make them feel conscious of their abilities, overcome barriers and have intentions to become entrepreneurs (Bratnicki et al., 2007).

Referring to previous studies (Drost & Mcguire, 2011; Shahab et al., 2019) as the researchers developed frameworks for entrepreneurial education and entrepreneurial intention by addressing the role of self-efficacy in enhancing intentions. Also, the study of Harun and Mark (2014) focused on highlighting the role of national culture to examine its effect on students’ entrepreneurial intentions. Consequently, Jordan is considered a small and developing Middle Eastern country with limited resources and a high number of graduate students, as well as a high rate of unemployment, which has risen from 18.7% in 2018 to 19.2% in 2019 due to the high migration rates from sanctioned countries like Syria. Also, rising to 24.7 percent in 2020 due to the pandemic (Mugableh, 2020). Likewise, the discussion to reform high education in Jordan is prospering as it takes into consideration the need for the market by transferring knowledge among universities and industries. Nonetheless, the concept of entrepreneurial education is still considered a new concept in developing countries (Sandri, 2016). Which calls for the necessity to examine it in the context of the current study.

To the best of the researcher’s knowledge, none of the previous studies took into consideration the role of psychological empowerment that focuses on increasing the internal inspiration for individuals to investigate its relationship between entrepreneurial education and entrepreneurial intention of university students. Therefore, and in the light of these gaps, the study aims to address the role of culture and psychological empowerment to highlight their effect on entrepreneurial intention.

2 Literature Review

The present research is based on multiple theories, first of all, drawing on the bases that Entrepreneurship is based on the Economic Theory which emphasizes that entrepreneurial activity can be comprehended through the abilities of humans that donate in the achievements and sustainability of economies (Casson & Casson, 2014).

Additionally, psychological empowerment which is derived from the social exchange theory as it contains the real interactions between individuals focusing on the elements that affect the process of human interactions. Similarly, the entrepreneurial education process includes interactions among professors and students to increase student’s awareness and knowledge about the process to initiate their own businesses (Bae, Qian, Miao, & Fiet, 2014).

In the 1970s, Geert Hofstede published his cultural model, and it is considered a turning point concept, a beginning, a base theory that assists in constructing the examination of cross-cultural theory, and one of the best models that explained the behaviour of individuals (Sivakumar & Nakata, 2001). It has been shown that culture has an impact on the psychological development of individuals (Hofstede & Bond, 1984). In return, the intention of individuals towards Entrepreneurship varies across different societies due to the different aspect of culture that distinguishes each country from other countries around the world (Urban & Ratsimanetrimanana, 2015).

Based on the previously mentioned theories, specifically the social exchange theory as it has been the focus of conducting the research model because in the process of entrepreneurial education for university students the professor interacts with these students and share knowledge with them in order to generate intentions towards entrepreneurship. Also, interactions with students and psychologically empower them can be affected by the beliefs and values generated form their culture, which also includes interactions between individuals in the same society to exchange views, thoughts, and norms that can affect developing entrepreneurial intentions and lead to actions of actual start-ups.

2.1 Entrepreneurial Education

Entrepreneurial education is known as the process of informing and educating students to build their capabilities in order to initiate their own business (Lackéus, 2017). It contains any educational or informational course about the activities of entrepreneurship that aim to increase student’s awareness and knowledge about the process to initiate their own businesses. As it increases student’s entrepreneurial abilities and influences their entrepreneurial perceptions (Bae et al., 2014). As it has been shown that an individual, specifically a student, needs to have a solid background concerning entrepreneurial education in order to execute entrepreneurship in a professional manner reducing risks. Entrepreneurial education in universities need to include up to date courses and practical experience to generate their intentions toward becoming entrepreneurs (Alshebahia et al., 2020).

In Jordan, the governmental policies modified the educational schemes to enhance student’s abilities, creativity, and innovativeness. Nevertheless, in Jordanian universities there is a lack of a suitable educational offering and subjects that guides the mentality of entrepreneurship (Mehtap, 2014). Moreover, universities in Jordan do not only teach some courses of entrepreneurship, but eight of them have entrepreneurship and innovation centers inside the campus, such as Princess Sumaya University for Technology (PSUT), Al Yarmouk University, and the Hashemite University. On the other hand, none of the universities have a department for entrepreneurship nor an undergraduate degree concerning entrepreneurship. It has been shown that teaching the skills of entrepreneurship and taking advantage of entrepreneurial education at
early stages such as schools is low in Jordan, as entrepreneurship is self-taught by individuals and often done after graduation. Lastly, entrepreneurial education in Jordan is considered adequate but more efforts need to be executed in the processes of implementing entrepreneurial education (Alakaleek, 2019).

2.2 Psychological Empowerment

It is known as creating and communicating power of influencing the beliefs and attitudes of individuals (Iqbal et al., 2020). It is known as the process of increasing the internal inspiration for individuals by identifying some cognitive factors that reflect the way people view their duties in the job they perform. These cognitions include meaning, competence, self-determination, and impact (Zhu et al., 2012).

Meaning is known as the extent to which an individual perceives his work as valuable (Zhu et al., 2012). Competence expresses the consciousness which the individual has that he/ she can achieve a mission efficiently and effectively (Siegall & Gardner, 2000). Self-Determination is the degree to which a person has the autonomy to accomplish missions according to his own direction (Avolio et al., 2004). The last dimension of psychological empowerment is Impact, it is known as the belief of a person that the work he accomplishes has a vital and crucial transformation by influencing and making a difference in the job he/ she performs and in the results of the organization he works in (Spreitzer et al., 1999).

2.3 Culture

Organizational culture is a fundamental element of any organization as it represents the behaviors, mutual visions, and values that participate in creating the environment of an organization (Warrick, 2017). While national culture which is the focus of this study, is known as the way individuals in a specific culture speak, dress, think, and have norms and beliefs (Kaur and Chawla, 2016). Another definition reflects culture as a form of programming the minds of members, which differentiates individuals across societies (De Mooij & Hofstede, 2010). Culture of societies is considered a vital factor of entrepreneurial activities locally, since it impacts standards, morals and thoughts, thus emphasizing appropriateness of behaviors for individuals in the society (Lortie et al., 2019). Moreover, differences in cultures have been highlighted clearly in the cultural model of Geert Hofstede as he conducted a study in the IBM company, implemented the analysis around 40 nations, and came up with cultural dimensions (Wu, 2006). Hofstede classified culture into different dimensions such as Power Distance, Collectivism vs Individualism, Masculinity vs Femininity, Uncertainty Avoidance and Long-Term vs Short-Term Orientation (Vershinina et al., 2017).

The reason for choosing the three dimensions in the study is that as represented in figure 1 which shows that uncertainty avoidance scores 65 which shows that Jordan has high uncertainty avoidance, long- term orientation is 16 which shows that Jordan has short-term orientation and masculinity is 45 which indicates that Jordan is a feminine culture.

![Figure 1: Hofstede's insight Jordan (Source: www.hofstede-insights.com)](image)

In this study the dimensions that have been chosen from the cultural model of Hofstede are (uncertainty avoidance, Masculinity vs Femininity, long-term vs short-term orientation) referring to figure 1 depending on the scores of each dimension. As shown that in Jordan people have a high level of uncertainty avoidance, likewise societies that have a high level of uncertainty avoidance, have less tendency for entrepreneurship behaviour and a lower probability of individuals to be independently employed (Yukongdi & Lopa, 2017).

As showing that Jordan is a feminine culture where in feminine cultures individuals appreciate the superiority of life and focus more on relations as they tend to have persistence, shared authorization, accomplishment, and team building so that they are more capable of collecting resources and building networks (Hofstede, 2019).
According to long-term orientation, Jordan is as short-term oriented culture that tends to have constancy, they are attached to traditions, and focus on the present and past events rather than planning for the future as they are less likely to devote enough time for entrepreneurial activities (De Mooij & Hofstede, 2010).

2.4 Entrepreneurial Intention

Intention means the extent that an individual creates an assessment towards a specific behaviour, likewise the higher the level of positivity regarding the consequences of initiating a start-up, the higher the favourability of executing the action (Joensuu-Salo et al., 2015). Moreover, entrepreneurial intention is the unquestionable indicator for entrepreneurship action, also comprehending the entrepreneurial intentions permits instructors, mentors, and decision-makers to have a transparent view of the way an intention can be created and the extent to which the values, insights, and motivations of novel business creators can influence their intention to actually initiate a new venture (Wang et al., 2011). It is important to concentrate on entrepreneurial intentions since it is the predictor and indicator of one’s actual behaviours of entrepreneurship, so as when an individual has an intention to become an entrepreneur it is more likely that he will perform a positive perception about that behaviour and form an actual business. Hence, comprehending the entrepreneurial intentions of students helps in predicting and gives more validation to the upcoming entrepreneurial actions, because when Intention increases, the probability that an action will occur increases (Joensuu-Salo et al., 2015).

2.5 Research Model

According to the previously mentioned models, the study of Harun and Mark (2014) suggested that further research is needed in the area of entrepreneurial education, Psychology, and culture. Also, the study of Drost & Mcguire (2011) suggested further studying of entrepreneurial education with psychological factors and self-efficacy through conducting further quantitative analysis including Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA). Which is used to test if the data is consistent with the hypotheses used by the researcher. It is also used as a validation of the construct and to evaluate measurements. CFA is considered as powerful evidence of the convergent validity and the discriminant validity. Convergent validity refers to the extent to which several items that make up a construct are related. For a construct to meet convergent validity, all the items should have path coefficients that are greater than 0.6, if unstandardized, and 0.4, if standardised (Schumacker & Lomax, 2016). On the other hand, discriminant validity determines the extent of correlation between two or more constructs, and the maximum tolerable covariance is 0.85 (Heck & Thomas, 2015; Loehlin & Beaujean, 2017).

Therefore, the researcher integrated the models and included psychological empowerment in the entrepreneurial education process to address its effect on entrepreneurial intention and culture as an independent variable to have the following model structure shown in Figure 2.

![Figure 2: Research Model (Source: Developed by the researcher)](image_url)
2.6 Entrepreneurial Education and Psychological Empowerment

Entrepreneurial education has a major effect on the beliefs and values that students have towards entrepreneurship since it is an influential and efficient way that delivers an important knowledge base for individuals’ development and enhancing their psychological abilities (Lashgarara et al., 2014). Moreover, entrepreneurial education motivates individuals to become entrepreneurs, as students acquire knowledge and have a better understanding of entrepreneurship as a future career. This understanding can impact the entrepreneurial intention of individuals (Yukongdi & Lopa, 2017). The process of educating students about entrepreneurship does not include only giving them instructions about how to track businesses, but also it provides them with a complete system which gives students the power and development to become innovative and seize openings, as a result, improve the economic situation in their countries (Mehtap, 2014). Therefore, it is hypothesized:

\[ H1: \text{There is a significant relationship between Entrepreneurial education and Psychological empowerment.} \]

2.7 Culture and Psychological Empowerment

Psychological empowerment process depends on individual’s interpretation and the way he/she builds values and thoughts since an individual executes additional cognitive interpretation that exceeds the interpretation of realities. Nevertheless, some individuals might have a feeling that they are not empowered due to their way of interpreting facts such as they might have a feeling that they cannot do a task, or the work they do is not valuable, they do not have the freedom to accomplish tasks their own way so that they are afraid to take risks (Focka et al., 2011).

To the best of the researcher’s knowledge, as the previous studies did not consider the relationship between culture and psychological empowerment, it has been concluded by the researcher that; when cultures have a low level of uncertainty avoidance they tend to take risks and deal with ambiguous situations so that they can be more psychologically empowered, in masculine societies where individuals give worth to competition and accomplishments tend to have a higher level of psychological empowerment and cultures who have long-term orientation look at the future and have long-term planning and have solid attitudes toward work which makes them more psychologically empowered. Therefore, it is hypothesized that:

\[ H2: \text{There is a significant relationship between Culture and Psychological empowerment.} \]

2.8 Psychological Empowerment and Entrepreneurial Intentions

All organizations must inspire individuals to think and act in an innovative way, encourage them to experience creativity in solving dilemmas that might face them, and motivate them to take risks. Moreover, psychological empowerment has a vital role in encouraging individuals to comprehend their innovative ideas and initiatives. As a result, psychologically empowered individuals have a higher level of innovation and creativity (Bratnicki et al., 2007). It is important to highlight the positive impact of developing and internally empowering individuals (Ertürk, 2012). Likewise, when individuals feel that they have the capability of pursuing tasks successfully, their intention towards pursuing that task increases (Shahab et al., 2019). Therefore, it is hypothesized that:

\[ H3: \text{There is a significant relationship between Psychological empowerment and Entrepreneurial intentions.} \]

2.9 Entrepreneurial Education and Entrepreneurial Intention

One of the major tools that can boost behaviours of individuals toward entrepreneurship is entrepreneurial education, as it has a strong relationship with increasing intentions. Entrepreneurial education provides a variety of information to leverage behaviours of individuals and has a strong impact on student’s tendency to initiate a business. (Hattab, 2014). Entrepreneurial education can also affect the attitudes and beliefs of students, as a result, affecting their entrepreneurial intention and inspire them to become entrepreneurs (Piperopoulos, 2012). It has been shown that students who take entrepreneurial courses, have more self-efficacy than other students who do not take courses concerning entrepreneurship, therefore the possibility of having entrepreneurial intention is higher (Sun et al., 2017). Therefore, it is hypothesized that:

\[ H4: \text{There is a significant relationship between Entrepreneurial education and Entrepreneurial intention.} \]

2.10 Culture and Entrepreneurial Intention

It is crucial to consider culture when discussing entrepreneurial intentions and actions because culture shapes the values, beliefs, and behaviours of individuals about the concept of entrepreneurship. Additionally, culture can enhance or prevent individuals from having entrepreneurial intentions or conducting entrepreneurial actions in their societies, as it is considered one of the most important factors for entrepreneurs, favourable cultural conditions can influence entrepreneurial intentions (Morrison, 2000;
According to Hofstede’s cultural dimensions, cultures with a low uncertainty avoidance tend to have more entrepreneurship activities, cultures with high masculinity have more entrepreneurship, and cultures that are long-term oriented have higher levels of entrepreneurial activity (Urban and Ratsimanetrimmana, 2015). Therefore, it is hypothesized that:

**H5:** There is a significant relationship between Culture and Entrepreneurial intention

### 3 Research Methodology

#### 3.1 Research Approach

The deductive approach has been used as the present research tends to examine existing theories and test them, since the deductive approach focuses on a previous and well-established theory to develop hypotheses by following a route from the generic theory to a specified state (Ryan, 2018). This research used already existing theories such as Hofstede’s cultural theory, Psychological Empowerment through the social exchange theory and Entrepreneurship through the economic theory and built hypotheses based on the prior research and knowledge, also the hypotheses have been tested and conclusions have been derived based on testing processes and experimental analysis.

#### 3.2 Research Choice and Data Collection Method

The current research used the quantitative approach since it is used for testing theories using the deductive method by having an existing theory, develop and explain hypotheses related to this theory it also emphasizes that the researcher and the research are separate from each other so that the researcher must examine the theory by having no impact on this theory. Moreover, the quantitative method is “experimental” which emphasizes generating hypotheses and research questions, testing them, and verify surrounding situations to avoid inadequate and unsuitable results (Slevitch, 2011).

#### 3.3 Survey Design

The survey was designed to include items for the constructs of the model, the items were taken from previously available scales such as entrepreneurial education which combined two scales taken from (Walter & Block, 2016; Souitaris et al., 2007). The scale of psychological empowerment with its four dimensions (meaning, impact, self-determination, and competence) was taken from (Spreitzer, 1995). Entrepreneurial intention scale was taken from (Linan et al., 2011). And the scale of culture was taken from (Yoo, Donthu & Lenartowicz, 2011). As they created the scale to measure culture at the individual level derived from Hofstede’s scale. The survey included forty-two items that measure the variables and four items that include demographics such as the educational level, experience level, gender, and age. The questionnaire used the five-point Likert scale ranging from strongly disagree to strongly agree. Furthermore, respondents were asked to fill out the survey either online or by distributing the printed questionnaire to them by going to universities and asking them to fill the printed questionnaire and collect them back.

#### 3.4 Reliability

Reliability covers important measurements such as errors of measurements, reliability, and consistency. It confirms that the instrument of measuring does not contain errors and it provides the same results, also when the measurement error is low, the reliability becomes higher (Scholtes, Terwee, & Poolman, 2018). The reliability of each scale used is as presented in Table 1:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Education</td>
<td>(α = 0.81), (α = 0.88)</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>Ranging from (α = 0.83 to α = 0.87)</td>
</tr>
<tr>
<td>Entrepreneurial Intention</td>
<td>(α = 0.87)</td>
</tr>
<tr>
<td>Culture</td>
<td>Ranging from (α = 0.74 to α = 0.91)</td>
</tr>
</tbody>
</table>
3.5 Validity

The validity of content is known as the degree by which measurements reflect a precise field of information. It is also known as the way by which studies can be considered as means that represent the world and the area of information being studied (Newman, Lim, & Pineda, 2013). In this research, the validity of the content was tested by distributing the questionnaire to professors to make sure that it is easily comprehended by university students.

Furthermore, construct validity was used in this research which is known as the degree by which conclusions and findings are derived out of the operationalization in the research based on theories and constructs. It is important to assess construct validity, because by the absence of construct validity, researchers will not be able to predict and confirm the findings, the test results of theories might be inaccurate, and the hypotheses could be rejected due to error in measurements rather than being rejected due to the inadequate theory (Bagozzi, Yi, & Phillips, 1991).

Face validity is known as the extent by which recipients create judgment for whether the items appropriately measure what they intend to measure (Hardestya & Beardenb, 2004). The items of the questionnaire have been reviewed subjectively, to make sure that they correspond with what the research aims to test.

4 Data Analysis

4.1 Demographic Analysis

The respondents of this research have been chosen on the bases of being an appropriate sample with non-observation to make sure their response will remain the same by using questionnaire to eliminate bias in the results. Table 2 presents the results of the demographic analysis:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Educational Level</th>
<th>Experience Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>54.55%</td>
<td>18-24</td>
<td>89.5% Students</td>
</tr>
<tr>
<td>Male</td>
<td>45.45%</td>
<td>25 - 34</td>
<td>9.1% Bachelor’s degree</td>
</tr>
<tr>
<td></td>
<td>35 - 44</td>
<td>1.4% Masters’ degree</td>
<td>11.4% Self-Employed</td>
</tr>
</tbody>
</table>

4.2 Reliability Analysis

For the study to be considered reliable, it is imperative to test for the reliability of the constructs to find the relationship between these constructs. Beaujean (2017) recommend the use of the Cronbach’s alpha for the determination of reliability. Therefore, in this study, reliability has been checked by testing the Cronbach Alpha for each scale of the constructs used in the model as shown in the Table 3:

Table 3: Reliability Testing

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Education (EE)</td>
<td>0.915</td>
<td>9</td>
</tr>
<tr>
<td>Psychological Empowerment (PE)</td>
<td>0.907</td>
<td>8</td>
</tr>
<tr>
<td>Entrepreneurial Intentions (EI)</td>
<td>0.899</td>
<td>6</td>
</tr>
<tr>
<td>Uncertainty Avoidance (UA)</td>
<td>0.861</td>
<td>5</td>
</tr>
<tr>
<td>Masculinity (MS)</td>
<td>0.868</td>
<td>4</td>
</tr>
<tr>
<td>Long-term Orientation (LO)</td>
<td>0.856</td>
<td>6</td>
</tr>
</tbody>
</table>
From the foregoing, it is evident that none of the reliability statistics were less than the required minimum threshold of 0.70 and according to Pallant (2013), this confirms that all the constructs used in this study were internally consistent, that is, reliable.

4.3 Descriptive Analysis

This section evaluates the perceptions of the respondents for each construct. This was done using both measures of central tendency and measures of dispersion, by measuring the mean and the standard deviation. A 5-point Likert scale was used to measure the perceptions by the respondents for each item, with 1 being strongly disagree and 5 being strongly agree.

The results (Table 4) show that on aggregate, the construct with the highest mean statistic rating was Psychological Empowerment followed by entrepreneurial education. The third highest rated item was entrepreneurial intentions. On the other hand, of the four constructs, the least rated was culture. While two of the sub-constructs for culture had relatively high mean statistics, uncertainty avoidance and long-term orientation. As a result, Masculinity was rated negatively by respondents which indicates they tend to be more feminine.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
<th>Kurt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Education (EE)</td>
<td>3.567</td>
<td>.830</td>
<td>-1.243</td>
<td>1.370</td>
</tr>
<tr>
<td>Psychological Empowerment (PE)</td>
<td>3.688</td>
<td>.723</td>
<td>-1.404</td>
<td>2.961</td>
</tr>
<tr>
<td>Entrepreneurial Intentions (EI)</td>
<td>3.457</td>
<td>.950</td>
<td>-0.802</td>
<td>.101</td>
</tr>
<tr>
<td>Culture (CL)</td>
<td>3.315</td>
<td>.635</td>
<td>-0.586</td>
<td>1.794</td>
</tr>
<tr>
<td>Uncertainty Avoidance (UA)</td>
<td>3.761</td>
<td>.810</td>
<td>-0.910</td>
<td>1.328</td>
</tr>
<tr>
<td>Masculinity (MS)</td>
<td>2.759</td>
<td>1.091</td>
<td>-0.080</td>
<td>-1.103</td>
</tr>
<tr>
<td>Long-term Orientation (LO)</td>
<td>3.424</td>
<td>.845</td>
<td>-0.921</td>
<td>.814</td>
</tr>
</tbody>
</table>

4.4 Structural Equation Modelling

Upon exploring the constructs that had been validated for the study, this section seeks to test the research hypotheses that addressed the key research objectives.

Since the research constructs were made up of several items, this meant that the study involved the use of latent variables (Byrne, 2012). According to Hancock and Mueller (2013), while multiple linear regression can be applied, in this instance, it was not robust for latent variable modelling since the scholars argued that Structural Equation Modelling (SEM) was the optimal test to use. Narayanan (2012), further argue that the use of multiple regression poses challenges in that it forces variables to be aggregated, thereby failing to account of the individual item effects, which is handled in Structural Equation Modelling. In this regard, the researcher considered the use of Structural Equation Modelling for the testing of the research hypotheses above.

Nevertheless, the Covariance-Based SEM (CB-SEM) was used in this study due to Byrne (2016) notes that CB-SEM is optimal for sample sizes greater than 200, while VB-SEM is optimal for sample sizes less than 200. Regarding the multivariate normality, according to Kline (2016) and Hair et al. (2017), for the multivariate normality assumption to be met the multivariate kurtosis must be greater than 7.0, and the critical ratio must be greater than 1.96. And from the outcome, the multivariate kurtosis was 325.243, while the critical ratio was 43.747. In this regard, because the sample size used in this study was 220>200 and that the multivariate normality assumption was met, CB-SEM was done using IBM SPSS Amos v26. The results from the structural equation modelling are presented in Figure 3.

In order to test the developed model of the study, the researcher used Structural Equation Modelling (SEM) to test the presented hypotheses.
Figure 3: Structural Equation Model
From the results (Table 5), it is shown that the beta coefficient for all the hypotheses is positive and p value is less than 0.05. Which indicates that all hypotheses were confirmed; the researcher confirmed that entrepreneurial education had a statistically significant positive effect on psychological empowerment since beta coefficient was 0.429 and (p = 0.000), psychological empowerment had a statistically significant positive effect on entrepreneurial intentions as beta coefficient was 0.131 and (p = 0.045), there is a statistically significant positive relationship between culture and psychological empowerment since the beta coefficient was 0.685 and (p = 0.000), entrepreneurial education had a statistically significant positive effect on entrepreneurial intention as the beta coefficient was 0.402 and (p = 0.000), finally the researcher confirmed that there was a statistically significant relationship between culture and entrepreneurial intention since the beta coefficient was 0.208 and (p = 0.036).

The r-square statistic for the link between entrepreneurial education and psychological empowerment was 0.688, and this meant that 68.8% of the variation in the dependent variable was explained by the independent variable, the r-square for the relationship between psychological empowerment and entrepreneurial intention was 0.654 which meant that 65.4% of the variation in entrepreneurial intention is explained by psychological empowerment. For culture and psychological empowerment, the r-square was 0.629, suggesting a total variance explanation of 62.9%. R-square for entrepreneurial education and entrepreneurial intention was 0.353 which meant that 35.3% of the variation in entrepreneurial intention is explained by entrepreneurial education. Finally, culture explained just 27.4% of the variation in entrepreneurial intention. Overall, the r-square statistic was 0.654, and this meant that 65.4% of the variation in the dependent variable was explained by the independent variables. This being a high statistic, which means that the variables considered for this study explained the greatest variance and that the residual variance unexplained was as a result of factors beyond the scope of this study.

5 Discussion

5.1 Theoretical Implications

The current study contributes to existing research by adding psychological empowerment with its four dimensions in the entrepreneurial education process to highlight its effect on entrepreneurial intentions of university students in Jordan. It is also among the first to link culture as an independent variable with psychological empowerment using Hofstede’s cultural model to address its effect on entrepreneurial intentions of students, contributing in increasing the awareness of universities and instructors in educating and empowering students as they will increase their interest and invest more in preparing students that are knowledgeable and capable of establishing their own businesses, as a result, the study will contribute in helping Jordan to enhance its economy through entrepreneurship.

Five hypotheses were generated to inspect the relationship between variables. This study is an extension to previous studies, as it answers the call of researchers (Anlesinya et al., 2019; Sharma, 2018) as they suggested to study the psychological factor and culture in other contexts and in different nations.

This study answers the call of (Drost & Mcguire, 2011; Harun and Mark, 2014). As they suggested focusing on the psychological factor and culture in the process of entrepreneurial education. Furthermore, this study is the first to add psychological empowerment in the entrepreneurial education process, it is also the first to use culture following one of the most prevalent cultural models (Hofstede’s cultural model) that provided a better understanding of the
way individuals behave and how they differ from one culture to another (De Mooij & Hofstede, 2010). By linking culture with psychological empowerment to examine its effect on entrepreneurial intentions of university students. The study provides a complete comprehensive model to combine psychological empowerment and culture as an expansion to the previous studies.

It is also the leading study to combine psychological empowerment and culture to examine their effect on entrepreneurial intention in Jordan.

Outcomes of this study reveal that culture has a positive effect on psychological empowerment and a positive effect on entrepreneurial intention, as it provides an answer to the suggestion of Harun and Mark (2014) as they suggested that the studies of entrepreneurial education should consider culture. Their study has examined the role of some independent variables chief among them is country culture, but without adding psychological empowerment. Also, their study was conducted in four countries (America, China, Belgium, and Turkey). Moreover, other studies (e.g. Anlesinya, Adepoju & Richter, 2019) highlighted the relationship between culture and women’s entrepreneurial intention in the African context specifically in Ghana. As the research suggested to study culture in a different context. Though, the current research investigated the effect of culture on entrepreneurial intentions by adding psychological empowerment and applied it in the Jordanian context.

Additionally, the outcomes of the current study underline the generalization of the effect of psychological empowerment in a Middle Eastern country (Jordan). Although, the previous study of Drost and Mcguire (2011) showed consistent findings regarding the relationship between entrepreneurial education and entrepreneurial intention through self-efficacy in western cultures.

The study of Sharma (2018) focused on studying the effect of culture and Gender on entrepreneurship intentions and was conducted in India, as it suggested for future studies to include the national culture of a specific country to examine its effect on entrepreneurial actions. Correspondingly, to the best of the researcher’s knowledge, there were no studies that focused on linking psychological empowerment with its four dimensions in the entrepreneurial education process, to examine its effect on entrepreneurial intentions of university students within the Jordanian context.

5.2 Practical Implications

The model of the current study is developed to examine the effect of entrepreneurial education on entrepreneurial intentions as much research are available in this area. To the best of the researcher’s knowledge, the current research aims to fill the gaps of the preceding research, as it is an addition to the previous literature by adding psychological empowerment and culture to examine their effect on entrepreneurial intentions. Also, this research is applied to university students in Jordan. Therefore, the developed model of the current research contributes to assist academic entities specifically universities.

Entrepreneurial education in Jordan can be improved by adding psychological empowerment to the process, as it has been shown from the findings of the current study that using psychological empowerment in the process of entrepreneurial education can affect student’s entrepreneurial intentions positively. This suggests that universities and instructors of entrepreneurship courses can focus on internally inspiring and motivating students to make them feel that they have the ability to establish their own business by training and giving them the freedom to establish business ideas, as it will have a greater impact on their decision of becoming entrepreneurs, rather than focusing only on providing them with theoretical information and knowledge about entrepreneurship. This can be done by conducting training for instructors to change their teaching way by increasing their abilities in empowering and internally inspiring students to motivate them and increase their entrepreneurial intentions.

Moreover, by practicing psychological empowerment in the education process, this will affect the cultural backgrounds of students, making them change their beliefs, attitudes and decrease the high level of uncertainty avoidance, making them more empowered and capable of establishing their start-ups. This study contributes to changing society’s culture by inspiring the future generation of students and encourage them to take the risk by having creative business ideas and initiating their start-ups.

Furthermore, when entrepreneurial education in Jordan is enhanced by internally inspiring students, this will encourage them to have their businesses and to choose entrepreneurship as their future profession, rather than focusing on the theoretical side of entrepreneurial education by focusing on providing them with information and knowledge while the student will still hold the same cultural beliefs.

Also, it is important to have entrepreneurship undergraduate major as it has many benefits such as providing realistic experiences for students to initiate their business, having a larger number of opportunities, students will learn skills and gain knowledge about the entrepreneurial process, and increasing the opportunity and intentions of students to become entrepreneurs (Oosterbeek, et al., 2010). At the same time connecting the entrepreneurship department in universities in Jordan with entrepreneurial incubators in order to provide students with practical experience to expand their knowledge and intentions to start their business.

When universities focus on psychological empowerment in educating students about entrepreneurship, this will increase their intentions of establishing their own businesses, as a result, this will contribute in enhancing the economic situation of Jordan. Due to the reason that
start-ups play a vital role in developing the economic situation of a country by decreasing unemployment rate and increasing competition in the market by encouraging creativity (Mesnard and Ravallion, 2006).

6 Limitations

There are some limitations to this research. First of all, the study has a cross-sectional design that limited the opportunity to fully comprehend the behaviour of students. It is suggested for future studies to adopt the longitudinal research design to better comprehend the changing intentional behaviour of university students. Second of all, the COVID-19 crisis limited the time for the researcher to collect data, as the Government has issued the decision of closing universities which restricted the ability to visit universities to distribute the questionnaire face-to-face as it took more time to collect the data online. Third, the study was conducted in Jordan only. Future studies can validate the model of the study by applying it in other countries in the Middle East such as Lebanon, Syria, and Turkey. Forth, the study focused on entrepreneurial intentions of students and did not investigate the elements beyond the intention, as it is recommended for future studies to add other dependent variables for the model such as start-up action to better understand what’s beyond the intentions of students. Fifth, the small sample size, it is recommended for future studies to have a bigger sample size. Finally, the study used only three dimensions of Hofstede’s model. Future studies can use the whole five dimensions of Hofstede’s cultural model to better understand the effect of cultural dimensions, as this study used only three of the dimensions.

7 Conclusion

Entrepreneurial education is the crucial element nowadays that can differentiate the entrepreneurial behavior of students as it can positively affect their entrepreneurial intention. Admitting to the fact that everyone is living in a society that has its own cultural beliefs and values that contributes to shape the attitudes of individuals, it has been shown that culture can affect the entrepreneurial intention of students. Consequently, to encourage students to have entrepreneurial intentions, an important factor that this study has shed the light on is psychological empowerment by using it in the process of educating students about entrepreneurship to motivate them and shape their intentions toward entrepreneurship as it also can be affected by their cultural surroundings.

The current study aimed to highlight the factors that contribute to shape entrepreneurial intention of students in Jordan by constructing a model to examine the effect of entrepreneurial education and culture on entrepreneurial intentions considering the role of psychological empowerment. It has been shown that educating students about entrepreneurship by internally motivating them can positively affect influencing their intentions towards entrepreneurship, the study also highlighted the role of culture in affecting the process of psychologically empowering students also shaping entrepreneurial intentions. Hence, all hypotheses were confirmed and all variables in the developed model were significant. Furthermore, the current research model has been applied in Jordan for the first time, as it will be useful for universities and instructors to follow in order to increase the entrepreneurial intentions of students, as a result contributing to enhancing the economic situation of a developing country like Jordan.

7 Conclusion

Entrepreneurial education is the crucial element nowadays that can differentiate the entrepreneurial behavior of students as it can positively affect their entrepreneurial intention. Admitting to the fact that everyone is living in a society that has its own cultural beliefs and values that contributes to shape the attitudes of individuals, it has been shown that culture can affect the entrepreneurial intention of students. Consequently, to encourage students to have entrepreneurial intentions, an important factor that this study has shed the light on is psychological empowerment by using it in the process of educating students about entrepreneurship to motivate them and shape their intentions toward entrepreneurship as it also can be affected by their cultural surroundings.

The current study aimed to highlight the factors that contribute to shape entrepreneurial intention of students in Jordan by constructing a model to examine the effect of entrepreneurial education and culture on entrepreneurial intentions considering the role of psychological empowerment. It has been shown that educating students about entrepreneurship by internally motivating them can positively affect influencing their intentions towards entrepreneurship, the study also highlighted the role of culture in affecting the process of psychologically empowering students also shaping entrepreneurial intentions. Hence, all hypotheses were confirmed and all variables in the developed model were significant. Furthermore, the current research model has been applied in Jordan for the first time, as it will be useful for universities and instructors to follow in order to increase the entrepreneurial intentions of students, as a result contributing to enhancing the economic situation of a developing country like Jordan.

7 Conclusion

Entrepreneurial education is the crucial element nowadays that can differentiate the entrepreneurial behavior of students as it can positively affect their entrepreneurial intention. Admitting to the fact that everyone is living in a society that has its own cultural beliefs and values that contributes to shape the attitudes of individuals, it has been shown that culture can affect the entrepreneurial intention of students. Consequently, to encourage students to have entrepreneurial intentions, an important factor that this study has shed the light on is psychological empowerment by using it in the process of educating students about entrepreneurship to motivate them and shape their intentions toward entrepreneurship as it also can be affected by their cultural surroundings.

The current study aimed to highlight the factors that contribute to shape entrepreneurial intention of students in Jordan by constructing a model to examine the effect of entrepreneurial education and culture on entrepreneurial intentions considering the role of psychological empowerment. It has been shown that educating students about entrepreneurship by internally motivating them can positively affect influencing their intentions towards entrepreneurship, the study also highlighted the role of culture in affecting the process of psychologically empowering students also shaping entrepreneurial intentions. Hence, all hypotheses were confirmed and all variables in the developed model were significant. Furthermore, the current research model has been applied in Jordan for the first time, as it will be useful for universities and instructors to follow in order to increase the entrepreneurial intentions of students, as a result contributing to enhancing the economic situation of a developing country like Jordan.

7 Conclusion

Entrepreneurial education is the crucial element nowadays that can differentiate the entrepreneurial behavior of students as it can positively affect their entrepreneurial intention. Admitting to the fact that everyone is living in a society that has its own cultural beliefs and values that contributes to shape the attitudes of individuals, it has been shown that culture can affect the entrepreneurial intention of students. Consequently, to encourage students to have entrepreneurial intentions, an important factor that this study has shed the light on is psychological empowerment by using it in the process of educating students about entrepreneurship to motivate them and shape their intentions toward entrepreneurship as it also can be affected by their cultural surroundings.

The current study aimed to highlight the factors that contribute to shape entrepreneurial intention of students in Jordan by constructing a model to examine the effect of entrepreneurial education and culture on entrepreneurial intentions considering the role of psychological empowerment. It has been shown that educating students about entrepreneurship by internally motivating them can positively affect influencing their intentions towards entrepreneurship, the study also highlighted the role of culture in affecting the process of psychologically empowering students also shaping entrepreneurial intentions. Hence, all hypotheses were confirmed and all variables in the developed model were significant. Furthermore, the current research model has been applied in Jordan for the first time, as it will be useful for universities and instructors to follow in order to increase the entrepreneurial intentions of students, as a result contributing to enhancing the economic situation of a developing country like Jordan.


JIEEE-01-2015-0008


**Hiba Kayed** holds a master’s degree in Business Entrepreneurship from Princess Sumaya University for Technology (PSUT). Worked as a teaching assistant at (PSUT) for two years. Her B.Sc. in E-marketing and social media from (PSUT). Currently working in the business and e-commerce field. Hiba’s research focuses on entrepreneurship, Culture, management, marketing, and empowerment.

**Amro Al-Madadha** holds a PhD in Management from Cardiff Metropolitan University – United Kingdom, he holds an MBA from New York Institute of Technology. His B.Sc. in Banking Management from Hashemite University. Currently, Dr. Al-Madadha teaches at Princess Sumaya University for Technology (PSUT) and Amro’s research focuses on leadership, empowerment, creativity, organizational behavior and human resource management. His research has been published at several international journals.

**Abdelraheem Abualbasal** is an Associate Professor at the King Talal School of Business Technology at Princess Sumaya University. He also has served as the dean of the King Talal School of Business Technology; Under his leadership, the business school became the first Business school in Jordan to achieve AACSB accreditation. Dr. Abualbasal is actively engaged in the entrepreneurship ecosystem in Jordan and the region. He is also the Managing Director of Global Entrepreneurship Jordan network (GEN) and has served as the Executive Director of Queen Rania Center for Entrepreneurship.
Appendix: List of Measurement Items

EE1-Entrepreneurship program helped me develop my sense of initiative—a sort of entrepreneurial attitude.  
EE2- Entrepreneurship program helped me to better understand the role of entrepreneurs in society.  
EE3- Entrepreneurship program made me interested to become an entrepreneur.  
EE4- Entrepreneurship program gave me skills and know-how that enable me to run a business.  
EE5- Entrepreneurship program creates my understanding of the attitudes, values, motivations of an entrepreneur (why do entrepreneurs act).  
EE 6- Entrepreneurship program creates my understanding of the action one needs to take in order to start a business (what needs to be done).  
EE 7- Entrepreneurship program creates my understanding of the practical management abilities and skills in order to start a new venture (how does one starts a business).  
EE 8- Entrepreneurship program creates my abilities to create networks (who do you need to need to know).  
EE 9- Entrepreneurship program creates my ability to identify an opportunity (when to act).

Psychological empowerment  
Meaning
M1-The work I do is very important to me.  
M2-My work activities are personally meaningful to me.  
M3-The work I do is meaningful to me.

Competence
C1- I am self-assurred about my capabilities to perform my work activities.  
C2-I have mastered the skills necessary for my job.

Self-Determination
SD1 -I have significant autonomy in determining how I do my job.  
SD2 -I can decide on my own how to go about doing my work.  
SD3-I have considerable opportunity for independence and freedom in how I do my job.

Impact
IM1-My impact on what happens in my department is large.  
IM2-I have a great deal of control over what happens in my department.  
IM3-I have significant influence over what happens in my department.

Entrepreneurial Intention
EI1 -I am ready to do anything to be an entrepreneur.  
EI2 -I will make every effort to start and run my own business.  
EI3 -I do not have serious doubts about ever starting my own business.  
EI4 -I am determined to create a business venture in the future.  
EI5- My professional goal is to be an entrepreneur.  
EI6 -I have high intention of starting a business.

Culture  
Uncertainty avoidance
UA1 -For me it is important to have instructions spelled out in detail so that I always know what I’m expected to do.  
UA2 - For me it is important to closely follow instructions and procedures.  
UA3 - For me rules and regulations are important because they inform me of what is expected of me.
UA4 - For me standardized work procedures are helpful.
UA5 - For me instructions for operations are important.

Masculinity

MAS1 - For me it is more important for men to have a professional career than it is for women.
MAS2 - For me men usually solve problems with logical analysis; women usually solve problems with intuition.
MAS3 - For me solving difficult problems usually requires an active, forcible approach, which is typical of men.
MAS 4 - For me there are some jobs that a man can always do better than a woman.

Long-term orientation

LO1 - I go on strongly in spite of disagreement (Persistence).
LO2 - I have Personal steadiness and stability.
LO3 - I do Long-term planning.
LO4 - I give up today’s fun for success in the future.
LO5 - I work hard for success in the future