**SUSTAINING ENTREPRENEURIAL INTENTION WITH ENTREPRENEURIAL LEARNING, ENTREPRENEURIAL KNOWLEDGE, HUMAN CAPITAL**

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***ABSTRAK***

*Penelitian ini bertujuan untuk menguji pengaruh pembelajaran kewirausahaan terhadap niat berwirausaha melalui pengetahuan kewirausahaan dan sumber daya manusia pasca pandemi COVID-19. Populasi penelitian ini adalah 7.246 mahasiswa jurusan bisnis dari universitas-universitas di Bali. Jumlah sampel sebanyak 379 dengan metode Slovin. Tautan survei online dikirimkan kepada responden melalui email. Sebanyak 279 kuesioner dikembalikan dan dipastikan valid dengan usable respon rate sebesar 73,61% kemudian dianalisis menggunakan WarpPLS 7.0. Hasil penelitian menunjukkan bahwa pembelajaran kewirausahaan berpengaruh terhadap pengetahuan kewirausahaan, modal manusia dan niat berwirausaha. Pengetahuan kewirausahaan tidak berpengaruh terhadap niat berwirausaha dan modal manusia berpengaruh terhadap niat berwirausaha. Penelitian ini juga menemukan bahwa pengetahuan kewirausahaan hampir tidak memiliki efek mediasi antara pembelajaran kewirausahaan dengan niat berwirausaha, dan human capital berhasil menjadi mediator parsial pengaruh pembelajaran kewirausahaan terhadap niat berwirausaha. Penelitian ini memberikan kontribusi pemahaman dan berguna bagi para akademisi, akademisi, dan praktisi di bidang kewirausahaan untuk menciptakan pandangan yang lebih luas tentang hubungan antara pembelajaran kewirausahaan, pengetahuan kewirausahaan, sumber daya manusia dan niat berwirausaha serta mekanisme mediasi yang terjadi dalam model kewirausahaan. generalisasi konseptual dan tujuan praktik kewirausahaan.*

*Kata kunci: entrepreneurial learning; entrepreneurial knowledge; human capital; entrepreneurial intention.*

**ABSTRACT**

This study examines the effect of entrepreneurial learning on entrepreneurial intention through entrepreneurial knowledge and human capital during the COVID-19 pandemic. The population of this study were 7,246 students majoring in business from Bali's universities. The sample size was 379 with the Slovin method. The link to the online survey was sent to respondents via email. Two hundred seventy-nine questionnaires were returned and confirmed valid, with a usable response rate of 73.61%. The results were analyzed using WarpPLS 7.0. The study resulted that entrepreneurial learning influenced knowledge, human capital, and intention. Entrepreneurial knowledge did not affect entrepreneurial intention, and human capital affected entrepreneurial intention. This study also found that entrepreneurial knowledge had almost no mediating effect between entrepreneurial learning and entrepreneurial intention, and human capital succeeded in being a partial mediator on the influence of entrepreneurial learning on entrepreneurial intention. Moreover, this study contributes to the understanding and is useful for scholars, academics, and practitioners in the field of entrepreneurship to create a broader view of the relationship between entrepreneurial learning, entrepreneurial knowledge, human capital, and entrepreneurial intention and mediation mechanism that occurs in the model for the conceptual generalization and entrepreneurial practices purposes.

Key words: entrepreneurial learning; entrepreneurial knowledge; human capital; entrepreneurial intention.

**INTRODUCTION**

The ability to manage resources and turn challenges into business opportunities indi-cates an entrepreneur's success (Park, 2017). This indicator of entrepreneurial success is often also a stimulus that encourages the emergence of intention from other indivi-duals to run a business. In addition, the sus-tainability intention in becoming an entre-preneur is also caused by the instability of the economic situation, vacancies, and fewer job opportunities during the COVID-19 pan-demic. Entrepreneurial intention is the desire and intention in formulating a plan to be-come an entrepreneur. The basis for deve-loping entrepreneurial intention comes from the theory of planned behaviour (TPB) with dimensions of subjective norms, attitude to-ward the behaviour, and perceived beha-vioural control (Farrukh et al., 2018). According to Miranda et al. (2017), intention is a significant determinant of realizing individual behaviour to become entrepre-neurs. The findings of Krueger et al. (2000) confirm that entrepreneurial intention pre-dicts the behaviour of individuals intent on becoming entrepreneurs (Yi, 2021).

However, there is a gap between inten-tion and actual behaviour to make it happen, according to (Kouthouris and Spontis, 2005), as a weakness of TPB-based studies. Many researchers have carried out research frame-works to predict intention using TPB, in-cluding those by Sušanj et al. (2015) and Joseph, 2017). Okun and Sloane's (2002) research highlights the gap in the relation-ship between intentions and actual beha-viour. TPB contributes to predicting inten-tion but cannot predict behaviour itself (Kouthouris and Spontis, 2005). Gaps occur when using TPB to predict, mostly stopping at behavioural intentions, so a strategy is needed to strengthen intentions to realize real behaviour. Most studies use TPB only as a theoretical basis (Kouthouris and Spontis, 2005) but do not find many theoretical and practical reasons that cause actual behaviour not to materialize. So further, Farrukh et al. (2018) suggest that much attention should be paid to the following research based on TPB, which is to use mediation or intervention.

Although there are gaps in research using TPB, it encourages researchers to test predictors of entrepreneurial intention, na-mely Miranda et al. (2017) and Farrukh et al. (2018). Other researchers, such as Nasip et al. (2017) and Woo (2018), proved this by testing the determinants of student intention to be-come entrepreneurs. According to (Beliaeva et al. (2017), students' intention to become entrepreneurs is preceded by entrepre-neurial learning, which is a process of acquir-ing entrepreneurial knowledge. Entrepre-neurial learning aims to ensure that students have an entrepreneurial spirit expressed through attitudes and creative and inno-vative behaviour when creating their bu-sinessses (Hisrich et al., 2017). The entre-preneurial learning process can foster entre-preneurial experiences and activities by generating the intention to carry out entre-preneurial activities. With entrepreneurial learning, it is possible to encourage the growth of entrepreneurial intention among students (Zhang et al., 2019).

Findings that indicate a gap in entre-preneurial intention research are also shown by Hisrich et al. (2017), which illustrates no significant correlation between entrepre-neurial learning and entrepreneurial inten-tion. Moreover, Souitaris et al. (2007) confirmed the need for a mediating variable to intervene in the effect of entrepreneurial learning on entrepreneurial intention. The need for mediating variables refers to Zhang et al. (2019), suggesting that the mediation mechanism is the focus of future research based on entrepreneurial intention. This suggestion also supports the research results of Nasip et al. (2017), which show the need for mediating mechanisms in entrepre-neurship about entrepreneurial intention. For this reason, it is necessary to fulfil the assumptions of research design mediation analysis by Baron and Kenny (1986), related to fulfilling the relationship between inde-pendent, mediating and dependent variables in the research model (Hair et al., 2017).

For this reason, and in response to filling this gap, this research also used a mediation mechanism to link the influence of entre-preneurial learning on entrepreneurial inten-tion with entrepreneurial knowledge and human capital as mediating variables. Support for the role of entrepreneurial know-ledge as a mediator is based on the findings of Politis and Gabrielsson (2015), which show that the entrepreneurial learning pro-cess can affect entrepreneurial knowledge (Shan and Lu, 2020). Meanwhile, the effect of entrepreneurial knowledge on entrepre-neurial intention shown by Hussain et al. (2021) strengthens and becomes the basis for researchers' considerations to use entrepre-neurial knowledge in mediating the relation-ship between entrepreneurial learning and entrepreneurial intention. The mediating role of human capital is supported by the findings of Seet et al. (2018) and Aboobaker and Renjini (2020) that entrepreneurial lear-ning predicts human capital to foster entre-preneurial outcomes. The impact of human capital on entrepreneurial intention is shown by Zhao's findings (2020), which show that entrepreneurial intention can grow and develop through efforts to increase the competitiveness of human capital (Kong and Kim, 2022).

After conducting a literature review re-garding the influence of mediation on entre-preneurial intentions, which included re-search conducted by several previous scholars, there was found that no research had been done on the use of human capital, entrepreneurial knowledge, or even both as mediators of entrepreneurial intention, such as (Souitaris et al., 2007), (BarNir et al., 2011), (Chen and He, 2011), (Prabhu et al., 2012), (Ullah et al., 2013), (Kumar and Shukla, 2019), (Zhang et al., 2019), (Kusumawijaya and Astuti, 2021), (Jiang et al., 2022). There-fore, it is important to research because testing the contribution of entrepreneurial learning to entrepreneurial intention by me-diating entrepreneurial knowledge and hu-man capital has never been done before. The novelty of this research is that it is the first attempt to build an empirical model of the contribution of entrepreneurial learning to entrepreneurial intention by mediating entre-preneurial knowledge and human capital.

Entrepreneurial learning is a process that includes knowledge acquisition, shar-ing, integration, and utilization (Politis and Gabrielsson, 2015). Both human capital and entrepreneurial knowledge are linked to knowledge and play a crucial role in entre-preneurial learning. Results Politis and Gabrielsson (2015) and Shan and Lu (2020) demonstrate the impact of entrepreneurial learning on entrepreneurial knowledge, and research on the impact of entrepreneurial learning on human capital by Seet et al. (2018) and Aboobaker and Renjini (2020). Human capital is a competent and important organizational resource for the success of knowledge activities (Kaldeen and Nawaz, 2020). The human capital of organizations is one of the key fruitful knowledge-empo-wering resources. Companies must focus on attracting and retaining human capital with the skills, knowledge, and behaviours to raise the organization's knowledge. Entre-preneurial knowledge plays a crucial and substantial role in entrepreneurship and reflects a potential entrepreneur's capability to recognize and capitalize on business op-portunities (Roxas, 2014). Politis and Gabrielsson (2015) confirmed that entrepre-neurial knowledge results from entrepre-neurial learning. Consequently, developing human capital (Zhao, 2020; Kong and Kim, 2022) and entrepreneurial knowledge (Hussain et al., 2021) are essential for fostering entrepreneurial intention.

This study contributes to the under-standing and is useful for scholars, aca-demics, and practitioners in the field of entrepreneurship to create a broader view of the relationship between entrepreneurial learning, entrepreneurial knowledge, human capital, and entrepreneurial intention and mediation mechanism that occurs in the model for the conceptual generalization and entrepreneurial practices purposes.

**THEORETICAL REVIEW**

**Theory of planned Behavior**

Intention refers to the TPB from Fishbein and Ajzen (1975) and Ajzen (1991) with dimensions of subjective norms, atti-tude toward the behaviour and perceived behavioural control (Krueger et al., 2000), which reflects the individual's desire to try to define the behaviour. According to Fishbein and Ajzen (2005), intention is a significant antecedent of behaviour. The stronger the individual's intention to display a certain behaviour, the more successful it will be (Miranda et al. (2017). Research generally uses TPB as a theoretical basis to predict the intention of certain behaviours, as did the initiators, such as Popescu et al. (2016) and Vuorio et al. (2017). However, researchers still see that TPB has a weakness regarding the gap between behavioural intentions and actual behaviour, which needs to be followed up with further research, such as the findings of Passaro et al. (2018), which show that intentions are not able to show support for the process of creating a business unit. The gap in intention with TPB is also related to research in entrepreneurship (Zhang et al., 2019).

**Entrepreneurial Learning**

Entrepreneurial learning is gaining knowledge, skills and experience about entrepreneurship (Peterson and Wu, 2021) to form creative, innovative and productive entrepreneurs. Entrepreneurial learning aims to produce business entrepreneurs (Hou et al., 2022) and create an entrepreneurial spirit for all professions. Process in entrepreneurial learning as a result of individual interactions with the environment occurs in the form of relatively permanent changes in entrepre-neurial attitudes and behaviour (Hisrich et al., 2017). The argument aligns with Bandura's (1999) social cognitive theory, which explains that individual learning occurs when one acquires knowledge, skills, and attitudes in a social environment. According to Zhang et al. (2019), entrepre-neurial learning is an effort to foster mental attitudes, motivation and behaviour to create new businesses. Entrepreneurial learning is a process to increase entrepreneurial know-ledge (Souto and Rodríguez-López, 2021), in which individuals must create business opportunities with all the consequences of the risks they face.

**Entrepreneurial Knowledge**

Knowledge is the value of information that is easy to understand and apply but is the most difficult form to manage (Si Xue, 2017). Entrepreneurial knowledge relates to entrepreneurial values (Hussain et al., 2021), indicating that an individual's systematic ability to create entrean preneurial compe-titive advantage (Ha et al., 2021). According to Ngah and Wong (2020)​​, entrepreneurial values are realized in entrepreneurial know-ledge, managed through knowledge, skills, and behaviour as intangible assets needed and utilized to achieve success in competi-tion (Marin and Chitimiea, 2020). As Mamun et al. (2019) indicated, entrepreneurial know-ledge consists of science and art that can shape individuals' mindsets, attitudes, moti-vations and behaviours to become entrepre-neurs. Entrepreneurial knowledge is the ability of individuals to turn innovative ideas into creative business opportunities (Moortel et al., 2021). Thus, an entrepreneur's ability to succeed is mostly based on the level of entrepreneurial knowledge.

**Human Capital**

Human capital is the overall knowledge, competence, attitude and character that exists in individuals (Ganotakis et al., 2021). As an intangible asset that is dynamic and not easily measured, human capital is an important resource that must be nurtured and developed in order to increase produc-tivity (Jimenez-Jimenez and Sanz-Valle, 2020). As Li and Tang (2017) stated, invest-ment in human capital is needed to develop and maintain creativity as a source of inno-vation and strategic renewal. The concept of human capital is developing along with in-creasing research activities linked with entre-preneurship (Seet et al., 2018). Further, Mirea et al. (2021) illustrate that the competitive-ness of human capital can be obtained through education.

**Entrepreneurial Intention**

Entrepreneurial intention is the desire and ability to encourage the creation and development of a business (Nasip et al., 2017). Entrepreneurial intention reflects an individual mindset (Jiatong et al., 2021) as an early stage in establishing a business. The prolonged crisis due to an unstable economy has resulted in fewer job opportunities, causing a growing interest in becoming an entrepreneur (Woo, 2018). Entrepreneurship activities also attract individuals and foster entrepreneurial intention to participate in starting a new business. Entrepreneurship is a dynamic process (Hisrich et al., 2017) and generally long-term in creating new busi-nesses by managing resources and iden-tifying business opportunities, challenges and risks. Entrepreneurial intention refers to the TPB theory developed by Fishbein and Ajzen (1975) and Ajzen (1991), which des-cribes an individual's desire to determine be-haviour (Zhang et al., 2019). TPB is often used to determine entrepreneurial intention and predict behaviour (Miranda et al. (2017).

**Entrepreneurial Learning and Entrepreneurial Knowledge**

Entrepreneurial learning is a learning process that involves transferring entrepre-neurial knowledge and gaining entrepreneu-rial experience (Haneberg, 2019). According to Zhang et al. (2019), entrepreneurial lear-ning is needed when an entrepreneur starts a business to improve the ability to manage a business, develop business opportunities, build business networks and determine the most appropriate business strategy. According to Hisrich et al. (2017), entre-preneurial learning is a learning process that occurs in individuals and causes relatively permanent changes in individual entrepre-neurial knowledge. Entrepreneurial know-ledge fosters entrepreneurial motivation, builds an entrepreneur's mental attitude, and increases the sense of business based on science and technology (Marin and Chitimiea, 2020). The findings of Shan and Lu (2020) show the role of entrepreneurial learning in creating entrepreneurial know-ledge, which indicates that entrepreneurial knowledge is generated from the entrepre-neurial learning process. The hypotheses that can be formulated from the above statement are as follows:

H1: Entrepreneurial learning has a significant positive effect on entrepreneurial knowledge.

**Entrepreneurial Learning and Human Capital**

Entrepreneurial learning is acquiring entrepreneurial competence to form creative and innovative attitudes and behaviours. The interaction process in entrepreneurial learning also develops the competitiveness of human capital (Seet et al., 2018), which is valuable, rare, difficult to imitate and irre-placeable. Today, more and more companies are interested in using human capital to gain an advantage. In entrepreneurial learning, there is a process of instilling entrepreneurial principles as a soul expressed into a business model and performance strategy that must be implemented to create entrepreneurial human capital, a key driver of dynamics capability (Queiró, 2021). Very few research findings still show the impact of entrepre-neurial learning on human capital. However, the integration of the entrepreneurial lear-ning process in building the configuration of human capital advantages cannot be ignored because human capital is the key factor for the success and growth of entrepreneurs. The support of Aboobaker and Renjini (2020) shows that the effectiveness of entrepre-neurial education and training can affect perceived human capital. The hypotheses that can be formulated from the above sta-tement are as follows:

H2: Entrepreneurial learning has a positive and significant effect on human capital.

**Entrepreneurial Learning and Entrepreneurial Intention**

Entrepreneurial learning is a learning system that fosters an entrepreneurial spirit in individuals so that they become creative and innovative (Hou et al., 2022). Entre-preneurial learning can increase entrepre-neurial knowledge and experience so that there is a behaviour change to create a bu-siness. Samo and Mahar (2017) found that entrepreneurial learning influences the intentions to establish a new venture. The findings of Nabi et al. (2018) indicated a significant effect between entrepreneurial learning and entrepreneurial intention. Therefore, the entrepreneurial learning pro-cess's success is shown by individuals in-volved in the learning process experiencing direct benefits such as growing entrepre-neurial motivation, increasing business ma-nagement competence, and growing entre-preneurial intention to start a new business (Zhang et al. (2019). The emergence of entre-preneurial intention that creates entrepre-neurial activities results from the entrepre-neurial learning process (Hisrich et al., 2017). Likewise, Beliaeva et al. (2017) found that entrepreneurial learning can drive the growth of entrepreneurial intention. The hypotheses that can be formulated from the above statement are as follows:

H3: Entrepreneurial learning has a positive and significant effect on entrepreneurial intention.

**Entrepreneurial Knowledge and Entrepreneurial Intention**

Knowledge has become one of the most important resources (Ngah and Wong, 2020) and a strategic resource and factor that offers sustainable competitive advantage. Know-ledge combines skills and thinking that involve cognitive processes, information, values ​​and experiences to solve problems (Hussain et al., 2021). In contrast, entre-preneurial knowledge is thinking creatively and acting innovatively to create business opportunities (Audretsch et al., 2020). Learning, observation and experience pro-duce entrepreneurial knowledge (Shan and Lu, 2020), which can be a mindset and resource for an entrepreneur's success. Entre-preneurial knowledge becomes the intangi-ble asset value of an entrepreneur with the ability to systematically integrate (Park, 2017) in creating business competitiveness advantages.

Moreover, Audretsch et al. (2020) fin-dings support the idea that the quality of knowledge, skills, and attitudes individuals possess greatly determines the process of realizing an interest in becoming an entre-preneur. Furthermore, research by Zhou et al. (2015) provides empirical evidence that entrepreneurial knowledge affects entrepre-neurial intention (Farani et al., 2016). The hypotheses that can be formulated from the above statement are as follows:

H4. Entrepreneurial knowledge has a sig-nificant positive effect on entrepreneur-rial intention.

**Human Capital and Entrepreneurial Intention**

Human capital is individual knowledge that is a source of creativity and innovation to sustain the intention to start a business (Munjal and Kundu, 2017). Investment in human capital plays a vital role in encou-raging and growing entrepreneurial inten-tion (Aboobaker and Renjini, 2020), innova-tion performance and competence sustain-nably. Moreover, the findings of Kong and Kim (2022) show that human capital impacts entrepreneurial intention. However, accord-ing to Loi (2017), human capital remains important in creating entrepreneurial inten-tion. According to Zhao (2020), entrepreneu-rial intention emerged from the competiti-veness of human capital. The hypotheses that can be formulated from the above statement are as follows:

H5. Human capital has a significant positive effect on entrepreneurial intention.

**Mediating Entrepreneurial Knowledge and Human Capital on The Effect of Entrepreneurial Learning and Entrepreneurial Intention**

The findings of Okun and Sloane (2002) show that there is a gap between intention and actual behaviour in research that uses TPB as a theoretical basis (Kouthouris and Spontis, 2005). Kouthouris and Spontis (2005) suggested the need for intervening variables to overcome the gap in question. The non-significant relationship between entrepreneurial learning and entrepreneurial intention in the findings of (Souitaris et al., 2007) is the reason for conducting this study to examine the determination of entrepre-neurial learning on entrepreneurial intention with a mediation mechanism. Referring to the research of Xiu-qing and Li (2013) and Politis and Gabrielsson (2015), where entre-preneurial knowledge is generated from the entrepreneurial learning process (Shan and Lu, 2020). Furthermore, the findings of Roxas et al. (2008) showed the effect of entre-preneurial knowledge on entrepreneurial intention. The findings of Seet et al. (2018) showed that entrepreneurial learning in-fluences human capital to foster entre-preneurial outcomes Aboobaker and Renjini (2020), and the impact of human capital on entrepreneurial intention was shown by Zhao (2020), Kong and Kim (2022). After conducting a literature review regarding the influence of mediation on entrepreneurial intentions, including research conducted by several previous scholars, it was found that no research had been done on the use of human capital, entrepreneurial knowledge, or even both as mediators of entrepreneurial intention. So, the researchers used entrepre-neurial knowledge and human capital to mediate the effect of entrepreneurial lear-ning on entrepreneurial intention. The hypo-theses that can be formulated from the above statement are as follows:

H6. Entrepreneurial knowledge can mediate the effect of entrepreneurial learning on entrepreneurial intention.

H7. Human capital can mediate the effect of entrepreneurial learning on entrepre-neurial intention.

The conceptual framework of this research is in Figure 1.

H1

H4

H2

H5

H3

H6

H7

**Figure 1**

**Conceptual framework**

Source: The Authors, 2023

**RESEARCH METHODS**

This research was conducted on stu-dents majoring in business at private univer-sities in Bali, which provides an entrepre-neurship curriculum in the learning process. A population of 7,246 students took the final semester of lectures. (Ministry of Education and Culture, 2023). The Slovin method was used to determine the sample size of 379, and an online survey was created with Google Forms to conduct the research. The question-naire links were sent to respondents via email. During the data collection process, the returned questionnaires were 279 and con-firmed valid, with a usable response rate of 73.61%. A five-point Likert scale was used to measure all items (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree). Entrepreneurial learning is measured using five aspect items adapted from the research of Zhang et al. (2019), consisting of why entrepreneurs act, what needs to be done, how to start the venture, whom I need to know and when I need to act. Entre-preneurial knowledge used six items adop-ted from Chen et al. (1998), consisting of having sufficient knowledge of the legal requirements to start a business, knowing how to find the resources to set up a busi-ness, having sufficient knowledge to orga-nize a business, having sufficient knowledge in managing a business, have sufficient knowledge in commercializing a business idea, have sufficient knowledge in marketing a product or service. Human capital used six items adopted from Lepak and Snell (2002) that has skills that are instrumental for creativity that affects efficiency and produc-tivity, instrumental for making process im-provements, skill would be very difficult to replace, competency is not available to our competitors, individual are developed through on the job experiences, individual difficult for our competitors to imitate or duplicate. Entrepreneurial intention is mea-sured by six items adopted from Ferreira et al. (2012): internal locus of control, pro-pensity to take risks, self-confidence, need for achievement, tolerance of ambiguity, and innovativeness. Data analysis was carried out using variance-based structural equation modelling with a partial least squares approach (SEM-PLS) (Hair et al., 2017) with WarpsPLS 7.0 (Kock, 2020). Descriptive sta-tistical results using SPSS 23 (Table 1), with agreeable answers indicated by mean values ​​of 4.21 (EL), 4.12 (EK), 4.05 (HC) and 4.13 (EI), indicating a value close to 4.00, meaning the average respondents agree with the item in question.

**Table 1**

**Descriptive statistics of variables studied**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Theoretical Score** | | **Actual Score** | | **Mean** | **SD** |
| **Min** | **Max** | **Min** | **Max** |
| EL | 1 | 5 | 3.20 | 5.00 | 4.21 | 0.54 |
| EK | 1 | 5 | 3.00 | 5.00 | 4.12 | 0.50 |
| HC | 1 | 5 | 3.17 | 4.83 | 4.05 | 0.46 |
| EI | 1 | 5 | 3.17 | 5.00 | 4.13 | 0.51 |

***Source: The Authors, 2023***

Descriptive statistical results using SPSS 23 (Table 1), with agreeable answers indi-cated by mean values ​​of 4.21 (EL), 4.12 (EK), 4.05 (HC) and 4.13 (EI), indicating a value close to 4.00, meaning the average respon-dents agree with the item in question.

**Table 2**

**Descriptive statistics of the respondent profile**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Frequency** | **Percent** |
| Gender | Female | 117 | 41.9 |
|  | Male | 162 | 58.1 |
|  | Total | 179 | 100 |
| Age | 20 or less years | 79 | 28.3 |
|  | 21 and above | 200 | 71.7 |
|  | Total | 279 | 100 |
| Student Status | Full-time student | 204 | 73.1 |
|  | Working student | 75 | 26.9 |
|  | Total | 279 | 100 |

***Source: The Authors, 2023***

As previously mentioned, the final data consisted of 279 replies. The current study is based on students completing the last semes-ter of lectures and learning in an entrepre-neurship curriculum as part of the educa-tional process. As a result, data can be collec-ted from the students respectively (Table 2). Based on the final data collected, 117 students identified as females, representing 41.9% of the data, while 162 students iden-tified as men, making up 58.1%. According to the age division of the data, 79 respon-dents identified in the age group of 20 years or less, which constitutes 28.3% of the data, and 200 respondents identified in the age group of 21 years or above, which constitutes 71.7% of the data. In addition to this, in terms of student status, 204 of the respondents reported being full-time students, 73.1% of the data, and 75 of the respondents reported being working students, constituting 26.9%.

**ANALYSIS AND DISCUSSION**

**Results**

The results of the goodness of fit eva-luation (table 3) refer to Hair et al. (2017); in this research, with an APC value is 0.418 with p < 0.001 and ARS is 0.492 with p < 0.001, and AARS is 0.489, this means that the research model meets the goodness of fit criteria significantly. The AVIF value of 2.349 and an AFVIF value of 2.672, smaller than five and ideally smaller than 3.3, means there is no vertical and lateral multicollinearity in this research model.

**Table 3**

**Goodness of Fit Research Model**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Value** | **P Value** | **Criterion** |
| APC | 0.418 | < 0.001 | significant if < 0.05 |
| ARS | 0.492 | < 0.001 | significant if < 0.05 |
| AARS | 0.489 | < 0.001 | significant if < 0.05 |
| AVIF | 2.349 |  | acceptable if <= 5, ideally <= 3.3 |
| AFVIF | 2.672 |  | acceptable if <= 5, ideally <= 3.3 |

***Source: The Authors, 2023***

Evaluation of validity measurement ins-truments (see Table 4) refers to Hair et al. (2017), which consists of convergent validity, which is also shown by the combination of loadings and cross-loadings in this study (see Table 3). Reflective constructs with a value above 0.70 and a significant p-value (<0.05) meet convergent validity, showing that the outer loading value is above 0.70 and significant. Convergent validity was also measured with an average variance extrac-ted (AVE) value greater than 0.5, indicating the validity of the indicator variables: entre-preneurial learning of 0.744, entrepreneurial knowledge of 0.757, human capital of 0.705 and entrepreneurial intention of 0.772. So, the convergent validity in this study was met. Discriminant validity criteria can be met because the value (√AVE) of all research latent variables is greater than the correlation coefficient of latent variables: entrepre-neurial learning is 0.738, entrepreneurial knowledge is 0.776, human capital is 0.736, and entrepreneurial intention is 0.787. For predictive validity, all research variables measured from the q-square value of the endogenous variables of the research model (see Table 4) greater than 0 (zero), thus fulfil-ling the predictive validity criteria.

**Table 4**

**Validity and Reliability Testing Results**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | | **Fact. Load.** | **AVE** | **Q-sq.** | **Comp. rel.** | **Cron. alpha** |
| EL | El1 | 0.799 | 0.744 |  | 0.856 | 0.788 |
|  | El2 | 0.724 |  |  |  |  |
|  | El3 | 0.814 |  |  |  |  |
|  | El4 | 0. 765 |  |  |  |  |
|  | El5 | 0. 772 |  |  |  |  |
| EK | Ek1 | 0.815 | 0.757 | 0.163 | 0.834 | 0.760 |
|  | Ek2 | 0.730 |  |  |  |  |
|  | Ek3 | 0.757 |  |  |  |  |
|  | Ek4 | 0.784 |  |  |  |  |
|  | Ek5 | 0.761 |  |  |  |  |
|  | Ek6 | 0.795 |  |  |  |  |
| HC | Hc1 | 0.819 | 0.705 | 0.596 | 0.798 | 0.795 |
|  | Hc2 | 0.739 |  |  |  |  |
|  | Hc3 | 0.732 |  |  |  |  |
|  | Hc4 | 0.758 |  |  |  |  |
|  | Hc5 | 0.824 |  |  |  |  |
|  | Hc6 | 0.781 |  |  |  |  |
| EI | Ei1 | 0.813 | 0.772 | 0.706 | 0.837 | 0.672 |
|  | Ei2 | 0.732 |  |  |  |  |
|  | Ei3 | 0.743 |  |  |  |  |
|  | Ei4 | 0.798 |  |  |  |  |
|  | Ei5 | 0.737 |  |  |  |  |
|  | Ei6 | 0.811 |  |  |  |  |

***\*All significant at p< 0.001***

***Source: The Authors, 2023***

While the reliability criteria are shown from the composite reliability and Cronbach's alpha value (Hair et al., 2017), each measurement instrument in this re-search model has a value greater than 0.7 (see Table 4), which means the instrument is re-liable. Thus, the data analysis process can continue to evaluate the structural model.

Effect size refers to Hair et al. (2017) with a value of 0.02 (weak), 0.15 (moderate), and 0.35 (large) to measure the effect of latent predictor variables on the structural research model. Table 5 shows in this study show the effect size value of entrepreneurial learning on entrepreneurial knowledge in the mode-rate category (0.162), the effect size of entre-preneurial learning on human capital (0.597) and entrepreneurial intention (0.443) in the large category and the effect size of entrepre-neurial knowledge on entrepreneurial inten-tion in the weak category (0.023), while effect size of human capital on entrepreneurial intention in the moderate category (0.250). From a practical perspective, the effect size value shows the important contribution of entrepreneurial learning, knowledge, and human capital in creating the entrepreneur-rial intention.

**Table 5**

**Effect size and R-squared**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Effect Size** | **EK** | **HC** | **EI** | **R-square** |
| EL | 0.162 | 0.597 | 0.443 |  |
| EK |  |  | 0.023 | 0.162 |
| HC |  |  | 0.250 | 0.597 |
| EI |  |  |  | 0.716 |

***Source: The Authors, 2023***

Measuring the percentage of variance in endogenous latent variables that are influ-enced by exogenous variables referring to Chin (1998), the R-squared value is 0.67 (substantial), 0.33 (moderate), or 0.19 (weak). In this research model (see Table 5), the entrepreneurial knowledge variable of 0.162 indicates weak criteria, human capital is mo-derate (0.597) and entrepreneurial intention of 0.716 is the substantial level. The results of this study indicate conformity with Henseler et al. (2009) that the R-squared value of the endogenous latent variable should at least show substantial criteria if it depends on several exogenous latent variables.

**Table 6**

**Path Coefficient**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **EK** | **HC** | **EI** |
| EL | 0.402\* | 0.773\* | 0.542\* |
| EK |  |  | 0.051 (p=0.195) |
| HC |  |  | 0.322\* |

***All significant at p<0.001\****

***Source: The Authors, 2023***

The results shown in Figure 2 and Table 6 prove that H1: there is a significant influ-ence of entrepreneurial learning on entrepre-neurial knowledge (β=0.402; p<0.001), H2: entrepreneurial learning has a positive and significant effect on human capital (β=0.773; p <0.001), and H3: entrepreneurial learning has a positive effect on entrepreneurial inten-tion significantly (β=0.542; p <0.001). The proof of H4 that entrepreneurial knowledge does not affect entrepreneurial intention sig-nificantly (β=0.051; p=0.195), and H5 that human capital has a positive and significant effect on entrepreneurial intention (β=0.322; p<0.001).



**Figure 2**

**PLS result**

***Source: The Authors, 2023***

**Table 7**

**Mediation analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **P → D w/oM** | **P → M** | **M → D** | **P → D w/M** | **VAF value** |
| 1 | 0.817\* | 0.402\* | 0.051 (p=0.195) | 0.542\* | 0.024 |
| 2 | 0.817\* | 0.773\* | 0.332\* | 0.542\* | 0.234 |

***Notes: P=predictor, D=dependent, M=mediator;***

***\* mean p < 0.001; w/o=without; w/=with.***

***VAF No.1= EL→EK→EI;***

***VAF No.2= EL→HC→EI.***

***Source: The Authors, 2023***

The VAF (Variance et al.) was used to measure the mediating variable of the re-search model (Hair et al., 2017). VAF is calculated by:

(Ppm x Pmd)/(Ppm x Pmd + Ppd w/o m) (1)

Where:

Ppm: effect of the predictor on mediator variable

Pmd: the effect of the mediator variable on the dependent variable

Ppd w/o m: effect of the predictor on a de-pendent variable without mediator variable.

VAF 1 = (0.402 x 0.051) / (0.402 x 0.051 + 0.817) = 0.024

VAF 2 = (0.773 x 0.322) / (0.772 x 0.322 + 0.817) = 0.234

The value of VAF 1 for H6 is 0.024 (see Table 7); according to Hair et al. (2017), if the VAF is less than 20%, it is categorized as having almost no mediating effect. So, it can be concluded that entrepreneurial know-ledge in this study has almost no mediating effect on entrepreneurial learning and entre-preneurial intention. The value of VAF 2 for H7 is 0.234, according to Hair et al. (2017). If the VAF is between 20% - 80%, it is cate-gorized as a partial mediator. The decision-making of the mediating variable in this study was also based on the predictor path coefficient on the dependent variable with the mediating variable (0.542). The value decreased but remained significant com-pared to the predictor path coefficient on the dependent variable without the mediating variable (0.817). So, it can be concluded that human capital in this study partially me-diates the effect of entrepreneurial learning on entrepreneurial intention (Preacher and Hayes, 2004).

**Discussion**

**Entrepreneurial Learning Affects Entrepreneurial Knowledge**

This study is similar to the findings of Shan and Lu (2020) that entrepreneurial learning affects entrepreneurial knowledge. This study shows that the effect of entre-preneurial learning is not included in the large category on the entrepreneurial know-ledge of students majoring in business at universities in Bali. This means that the entrepreneurial learning process carried out during the COVID-19 pandemic has not been able to enhance their skills to develop a busi-ness plan. Besides that, the entrepreneurial learning process has not been able to im-prove the ability to develop and obtain useful business network information. So, the contribution of entrepreneurial learning tends to be weak in increasing entrepre-ne-urial knowledge. This is because the entre-preneurial knowledge obtained from the en-trepreneurial learning process does not make students know how to find the resources to set up a business; students do not have suf-ficient knowledge to organize a business, and they do not have sufficient knowledge in commercializing a business idea and do not have sufficient knowledge. Sufficient know-ledge in marketing a product/service. However, this study still succeeded in supporting the findings of Chen et al. (1998), which shows that entrepreneurial learning can describe the extent of one's knowledge in various aspects of starting and managing a business (Zhang et al., 2019). Other research support for the findings of this study was carried out by Shan and Lu (2020).

**Entrepreneurial Learning Affects Human Capital.**

The results of this study indicate that entrepreneurial learning is proven to be able to influence human capital. This finding indicates that the entrepreneurial learning process followed by students majoring in business at universities in Bali can shape them into human capital with sustainable future competitiveness. Although the pro-cess was held during the COVID-19 pande-mic, entrepreneurial learning for students can develop student potential as human capital to create a competitive advantage. The competitiveness of human capital for students when participating in entrepre-neurial learning can increase understanding of the attitudes of entrepreneurs, increase understanding of generating innovative ideas, and enhance the ability to identify a business opportunity. This study indicates that entrepreneurial learning has a large and significant effect, so human capital in this context is students who have skills that are instrumental for creating innovations, have skills that would be very difficult to replace, and have competencies that are not available to others. Thus, entrepreneurial learning be-comes a strong impetus to improve skills, capabilities, commitments, competencies and experiences as the economic value of human capital. Although the results of this study are different from the findings of Queiró (2021), which shows that entrepreneurship learning has a limited impact on human capital, the findings of Seet et al. (2018) show support for the findings of this study, that entrepre-neurial learning is a predictor of human capi-tal to foster entrepreneurial outcomes among students (Aboobaker and Renjini, 2020).

**Entrepreneurial Learning Affects Entrepreneurial Intention.**

Support for hypothesis H3, which states that entrepreneurial learning affects entre-preneurial intention, is proven in this study. The results of this study were also shown by Nabi et al. (2018), who found that the influence of entrepreneurial learning in some cases even led to a decrease in entrepreneur-rial intentions. According to Westhead and Solesvik (2016), even entrepreneurial lear-ning students did not benefit all students equally. However, despite contrasting re-sults, this study also contributes to incre-asing the understanding that entrepreneurial learning still matters in fostering entrepre-neurial intention among students majoring in business at universities in Bali. Even though it was during the COVID-19 pande-mic, entrepreneurial learning as a process for students is still important because it can increase confidence, encouragement and a strong desire to become an entrepreneur. Entrepreneurial learning fosters student self-competence, so they have the drive and desire to realize creative ideas into a business entity. Furthermore, this study proved the role of entrepreneurial learning to comple-ment the concept of both behavioural and psychological approaches in explaining entrepreneurial intention Hongdiyanto et al. (2020). So, entrepreneurial learning is more focused on developing entrepreneurial beha-viour and knowledge because the impact can be more significant on the business creation process. This study shows the same results as the findings of Beliaeva et al. (2017), which provide new insights into the determinants of entrepreneurial intentions by establishing a significant association with entrepreneurial learning (Zhang et al., 2019). The same fin-dings that support this study were also gene-rated from the research conducted by Samo and Mahar. (2017) and Hou et al. (2022).

**Entrepreneurial Knowledge Does Not Affect Entrepreneurial Intention Insignificantly.**

The hypothesis, which states that entre-preneurial knowledge affects entrepreneur-rial intention, is rejected in this study. The results of this study are evidence that the entrepreneurial knowledge of students majoring in business at universities in Bali post the COVID-19 pandemic was unable and did not significantly affect entrepre-neurial intention. Due to the situation after the COVID-19 pandemic, economic condi-tions and all types of businesses did not work worldwide, including entrepreneurial lear-ning activities. Likewise, entrepreneurial knowledge sharing was not effectively car-ried out with restrictions on activities in almost all fields worldwide. The impact of all that is described in this finding is that the entrepreneurial knowledge of students is indicated by the lack of knowledge to find the resources to set up a business, lack of sufficient knowledge to organize a business and lack of sufficient knowledge in comer-cializing a business idea. That situation caused the benefits of the knowledge-shar-ing process to not be paid attention to. The impact that appears is that students fear or give up if they don't have adequate entre-preneurial knowledge to realize their inten-tion to become entrepreneurs. Regardless of the actual conditions at that time, the sig-nificance of knowledge is a valuable asset for students to create business. According to Hussain et al. (2021), the ability to utilize knowledge will create competitiveness and superior value. Knowledge can make entre-preneurs much more powerful (Audretsch et al., 2020) so they can evaluate when facing uncertainty and risks. The results of this study also failed to confirm the findings of Marin and Chitimiea (2020), which indicated that entrepreneurial knowledge was a deter-minant of the emergence of entrepreneurial intention.

**Human Capital Affects Entrepreneurial Intention.**

The results of this study indicate that the H5 hypothesis can be proven that human capital can influence entrepreneurial inten-tion. This study confirms that the human capital perceived by students majoring in business at universities in Bali is a unique characteristic consisting of a combination of competence, commitment, skills, innovation, and capability to realize their intention to become entrepreneurs. As a resource, human capital can create added value that contri-butes to a sustainable competitive advantage for entrepreneurs in the future. This is in line with Mutamba (2016), who described that the fundamental principle underpinning human capital is the belief that people's learning capacities are of comparable value to other resources involved in producing goods and services. Despite the COVID-19 pandemic, students still believe that in the future, the competitiveness of human capital will be instrumental in creating innovations, can contribute to the development of new opportunities, has competence would be very difficult to replace and not available to competitors as well as difficult for competi-tors to imitate or duplicate. According to Kong and Kim (2022), the human capital approach is a strategy to increase individual superior competitiveness, creativity, and fu-ture innovation capacity. So that the compe-titiveness of human capital will encourage the growth of entrepreneurial intention and the creation of new job opportunities. The results of this study are the same as the findings of Zhao (2020), which show that entrepreneurial intention can grow and develop through efforts to increase the com-petitiveness of human capital (Aboobaker and Renjini, 2020).

**Entrepreneurial Knowledge is Unable to Mediate The Effect of Entrepreneurial Learning on Entrepreneurial Intention.**

Hypothesis 6 in this study, which states that entrepreneurial knowledge mediates the effect of entrepreneurial learning on entre-preneurial intention, is rejected. The results of this study indicate the inability of entre-preneurial knowledge to mediate the effect of entrepreneurial learning on the entre-preneurial intention of students majoring in business at universities in Bali. This study also shows that entrepreneurial knowledge is not accepted as a mediator to support the findings of Souitaris et al. (2007), which re-quires a mediation mechanism to overcome the insignificant effect of entrepreneurial learning on entrepreneurial intention. The proof of entrepreneurial knowledge as a mediating variable in this study also failed to respond to the findings of BarNir et al. (2011), who suggested that future research on entrepreneurial intention should focus more on the mechanism of the mediation process (Zhang et al., 2019) as also done by Woo (2018) and Kumar and Shukla (2019). Entrepreneurial knowledge was almost unable to play a role as a mediator in this re-search because, during the COVID-19 pan-demic, there were restrictions on acti-vities. So, entrepreneurial learning activities also do not maximally contribute to creating entre-preneurial knowledge, as shown in hypo-thesis 1 in this study.

Furthermore, the inability of entrepre-neurial knowledge to influence entrepre-neurial intention, as proven in hypothesis 4 in this study, makes entrepreneurial know-ledge even more incapable of being a mediator. For students to have entrepre-neurial intention, it is not enough to have en-trepreneurial knowledge; they must gather more experience and training related to entrepreneurship (Zhou et al., 2015). The entrepreneurship experience and training were not obtained during the COVID-19 pandemic, so the impact of entrepreneurial knowledge could not contribute to the results of this study. This study also failed to support the findings of Kumar and Shukla (2019), which indicates the significance of knowledge in starting a business and knowledge in managing a business.

**Human Capital Mediates The Effect of Entrepreneurial Learning on Entrepreneurial Intention**

The role of human capital in mediating the influence of entrepreneurial learning on entrepreneurial intention in this study can be proven. The results of this study indicate that despite facing the COVID-19 pandemic, human capital remains a competitive advan-tage that can encourage students majoring in business at universities in Bali to realize their intention to become entrepreneurs. The competitiveness of human capital can build entrepreneurial characteristics in students, including the need for achievement, propen-sity to take risks, internal locus of control, self-confidence, innovativeness, and toleran-ce of ambiguity. Therefore, it is undeniable that students also think that entrepreneurial learning is still a matter of determining the creation of competitive human capital and fostering entrepreneurial intention. Entre-preneurial learning can create human capital as an individual competency, which is an instrument for making process impro-vements, skills that are instrumental for creating innovations, skills that would be very difficult to replace, are not available to competitors, are developed through on-the-job experiences and are difficult to imitate or duplicate. This finding illustrates that the mediation mechanism played by human capital is partial. However, this study still contributes to the findings of Souitaris et al. (2007) about the importance of mediating mechanisms as predictors of entrepreneurial intention (Zhang et al., 2019). The mediating role of human capital has also solved the lack of influence of entrepreneurial education on entrepreneurial intention in the research of Sanyal and Al Mashami (2018). The results of this study, at the same time, strengthen the findings of research that uses a mediating role in the mechanism of the influence of entrepreneurial education on entrepreneur-rial intention conducted by Murad et al. (2019), Yousaf et al. (2020), Melchor-Duran et al. (2020), Lv et al. (2021) and Hassan et al. (2021).

**CONCLUSION AND SUGGESTIONS**

**Conclusion**

This study found that there was a significant effect of entrepreneurial learning on entrepreneurial knowledge, entrepreneur-rial learning has an effect on human capital, a positive influence of entrepreneurial lear-ning on entrepreneurial intention signifi-cantly, entrepreneurial knowledge has no effect on entrepreneurial intention insigni-ficantly, human capital has an effect on entrepreneurial intention, entrepreneurial knowledge unable mediates the effect of entrepreneurial learning on entrepreneurial intention, and human capital mediates the effect of entrepreneurial learning on entre-preneurial intention. This research has limi-tations, namely that it is only conducted on students majoring in business at private universities, so to broaden conceptual gene-ralizations, it is recommended that further research be conducted in other majors, in-cluding state universities. It is very necessary to create and develop an entrepreneurial spirit in students from all majors so that entrepreneurial potential can be explored and identified by a more diverse population to create the competitiveness of future entre-preneurs; this study only examines entre-preneurial learning, entrepreneurial know-ledge, and human capital and their influence on entrepreneurial intention directly or indirectly. However, it does not examine the role of determining other variables that can contribute to the growth of entrepreneurial intention. So, in future research, it is recom-mended to examine the role of other varia-bles that are predictors of entrepreneurial intention so that the sustainability of acti-vities realizes the intention to become an eco-nomic ecosystem based on the competiti-veness of entrepreneurial capital.

**Suggestions**

An important contribution of this re-search is that it can provide an unders-tanding for academics, students, scholars, educational institutions and business prac-titioners, as well as the community, that a competitive learning system is still a matter of not only fostering entrepreneurial inten-tion but paying much attention to the formation of added value for entrepreneurial capital in realizing sustainable revenue. In the future, entrepreneurial capital can be defined as an intangible asset of knowledge, skills and experience. Entrepreneurial capital is a source of competitive advantage, as shown by its dynamic, innovative, and adap-tive character in the sustainable advance-ment of science and technology that creates economic value. The managerial implication of this research is to provide an under-standing that future business practices invol-ve formulating entrepreneurial capital as the right strategy to build a sustainable compe-titive advantage to survive and run well.

The study provides significant insight for higher education policymakers and uni-versity leaders. It suggests that universities can encourage self-employment by highly qualified workers. Numerous universities are moving toward a more entrepreneurial culture by establishing entrepreneurship programs, encouraging lecturer and student spin-off activities, and building networks with entrepreneurs. Universities' entrepre-neurrial culture affects the employment choices of graduates, especially the proba-bility of university graduates entering self-employment. Therefore, positioning uni-versities as entrepreneurial universities can be an effective strategy for directing aca-demics toward more entrepreneurial behaviours.

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