Mediated Mediation Model to Examine the Nexus among Entrepreneurship Skills, Entrepreneurship Attitude, Entrepreneurship Intention and Start-up Preparation of the Undergraduates in the Selected Universities in Sri Lanka

[*]N. Thevanes[1], A. Puspanathan[2]

[1] *Trincomalee Campus, Eastern University, Sri Lanka*

nadesthev@gmail.com

[2] *University of Vavuniya*

pushpa642002@yahoo.com

INTRODUCTION

Entrepreneurship is the dynamic process of creating incremental wealth for the country (Holt, 2018). Entrepreneurship is considered as one of the factors of production. Entrepreneurs can produce goods and services by combining other economic factors such as land, labour, and capital (Holt, 2018). Therefore, entrepreneurs are essential to ensure the effective and efficient utilization of the country's land, labour, and capital. Thus, there is a highly felt need for entrepreneurship development to reduce unemployment and accelerate the country's economic growth. However, according to the global entrepreneurship index (2019), Sri Lanka is recorded in 101st place.

According to the Central Bank Report (2020), the unemployment rate rose above 5 per cent for the first time since 2009 in Sri Lanka with the high levels of youth unemployment, a large share of which comprises those with the educational attainment of G.C.E. Advanced Level (A/L) and above. Alarmingly, unemployment among the graduates is considered a critical problem in Sri Lanka which requires an immediate solution. University graduates confront significant challenges to find a suitable job after graduation even though degree certificates are obtained after 3 or 4 years of hard work (University Grant Commission, 2018). Graduates generally expect government jobs due to job security and pension schemes (Ariyawansa, 2008). Further, some graduates, including management graduates, are waiting to be employed by government recruitment schemes (Wickramarachchi, 2008). However, the public opinion over the Sri Lankan university education system is that universities are not producing suitable graduates, especially in social sciences, including management (Ariyawansa, 2008). Therefore, feasible efforts are required from the government, universities, and other relevant stakeholders to address graduate unemployment as a national priority.

In this context, transforming the graduates into entrepreneurs can be considered an effective solution for the graduate unemployment problem. It is highly possible for the management graduates as their curriculum is related to business and management. Twelve universities in Sri Lanka offer management degrees. Hence, Sri Lankan universities need to consider more about creating entrepreneurs who can create new organizations and jobs instead of being job seekers. Researchers revealed that it is possible to shape and reshape entrepreneurship behaviours, entrepreneurial competencies and attitudes among the students through entrepreneurship education programmes (Kuttim et al., 2014; Storen, 2014; Belas et al., 2019). Entrepreneurship education may positively impact gross value-added economy measures (Smith et al., 2014).

Further, investing in entrepreneurship education can be treated as one of the highest return investments for reducing unemployment among graduates (Kuttim et al., 2014). The education system in each country should serve as its core platform and should allow students to create a good and quality base for successful entrepreneurship in the future (Kozina and Ponikvar, 2015; Jelonek, et al., 2017). University is critical in developing graduates' motivation and capabilities to effectively engage in entrepreneurial activity (Pickernell et al., 2011). Universities have a critical role to play as institutions that are expected to be more than just a place for research and teaching; they must also be a dynamo for intensive skill infusion and an incubator for non-linear idea generation that can empower graduates to start their businesses, harnessing the creative force of innovation, rather than joining the workforce in established public and private sector organizations (Caliendo and Kritikos, 2012). In considering above facts, Sri Lankan universities have been introducing several entrepreneurial study programs to undergraduates as well as postgraduates. Universities strive to develop entrepreneurial competencies (skill and knowledge) and attitudes among the graduates via implementing entrepreneurial education programmes. In this sense, entrepreneurship curriculum content provides a theoretical basis for understanding business management while also equipping undergraduates with the knowledge, skills, attitudes and behaviours that are arguably crucial for successfully starting and managing small businesses.

In this context, many researchers argued that providing entrepreneurship education programmes to the students contributes to improving the entrepreneurial competencies and attitudes (Çolakoğlu and Gözükara, 2016; Sánchez, 2013; Jones and Jones, 2017). Researchers have suggested that entrepreneurship education plays a crucial role in developing entrepreneurial skills for economic benefit (Mohamedbhai, 2015; Jones et al., 2017). According to Sri Lankan Qualification Framework (2015, p.13), knowledge is defined as "*what the qualification holders know*"; skill is defined as "*what the qualification holders can do*"; and attitude is defined as "*how the qualification holders think and behave*". Thus, universities need to pay more attention to developing entrepreneurial skills and attitudes among the students rather than providing theoretical knowledge on entrepreneurship. Some authors have stated that entrepreneurship attitude and intentions are essential factors in starting a new

venture or being self-employed (Ulvenblad, et al., 2013; Reyad et al., 2019, Manun et al., 2017; Jena, 2020; Tomy and Pardede, 2020). According to Moriano et al. (2012), the most robust antecedent of entrepreneurial intention is a positive entrepreneurship attitude. Furthermore, the entrepreneurial intention is a strong predictor of future start-up preparation (Krueger et al., 2000).

Based on the facts above, it is reasonable to assume that entrepreneurship skills, entrepreneurship attitude, entrepreneurship intention, and start-up preparation are interconnected concepts. However, only a few studies were conducted in Sri Lanka in this research scope. Universities can be seen as potential sources of future entrepreneurs since the education offered by universities mainly influences the career selection of students (Thurik et al., 2008). Becoming an entrepreneur can be seen as a career choice. In this sense, there is an urgent need felt in Sri Lanka to examine the relationships among undergraduates' entrepreneurial skills, intention, and attitude and start-up preparation due to the high employment among the graduates. In this context, there is a need to explain the relationships among entrepreneurial skills, entrepreneurial attitude, entrepreneurial intention and start-up preparation theoretically and empirically. Entrepreneurial skills, entrepreneurial attitude, and entrepreneurial intention are essential elements for start-up preparation for a new business. In the existing literature, these relationships are not explored and remain unclear. Therefore, this study fills these relationship gaps in the existing literature. Thus, the study formulated the problem statement: "what are the relationships among entrepreneurship skills, entrepreneurship attitude, entrepreneurship intention and start-up preparation in the selected universities' undergraduates in Sri Lanka?"

OBJECTIVES OF THE STUDY

Specifically, this paper attempts to achieve the following four objectives. The objectives are;

1. To find out the relationships among entrepreneurship skills, entrepreneurship attitude, entrepreneurship intention and start-up preparation
2. To explore the effects of entrepreneurial skills on start-up preparation with the mediating role of entrepreneurship attitude
3. To examine the mediating effects of entrepreneurship intention on the relationship between entrepreneurship skills and start-up preparation
4. To explore the mediating effects of entrepreneurship attitude on the linkage between entrepreneurship skill and entrepreneurship intention

REVIEW OF LITERATURE

Table 1: Meaning of the Concepts

Concept	Definition
Entrepreneurship Skill	Entrepreneurship skills are referred to the core ability to perceive, inquire, articulate, organize, and be self-motivated to take on entrepreneurial choices (Olutuase et al., 2020). In addition, Rosique-Blasco et al. (2016) revealed that innovation and risk-taking are the fundamental and inherent skills to start a business. Therefore, this study is considered innovation and risk-taking as entrepreneurship skills.
Entrepreneurial Attitude	According to Robbins and Judge (2013), attitude is defined as "the evaluative statements or judgments concerning objects, people, or events". Further, Robbins and Judge (2013) stated that attitude has three components such as cognitive component (the opinion or belief segment of an attitude); affective component (the emotional or feeling segment of an attitude) and behavioural component (an intention to behave in a certain way toward someone or something). Therefore, researchers defined entrepreneurial attitude as the collection of beliefs, affect and behavioral intentions a person holds regarding entrepreneurship. On other words, entrepreneurship attitude is a positive feeling, beliefs about entrepreneurship and behavioural intention to engage with entrepreneurial activities.
Entrepreneurship Intention	Entrepreneurship intention is defined as a "set of broader personal orientations, dispositions, desires, or interests that might lead to venture creation, and also as nascent entrepreneurship including those who have only thought about establishing an own business and those who have taken more specific steps towards that" (Thompson, 2009 p.672).
Start-up Preparation	Start-up preparation refers to the "process of preparing for self-employment by scanning the environment, gathering resources, networking, and undergoing training"(Katz, 1990,

as cited in Manun et al., 2017, p.301).

Entrepreneurship Skill and Start-Up Preparation

Entrepreneurs are required to consistently overcome the obstacles faced in obtaining and using the resources necessary to start, grow, and sustain a business. In this sense, entrepreneurship skills are the most apparent requirement to successfully start and run a business (Lyons et al., 2019). Furthermore, it is argued that individuals having more entrepreneurship skills will probably feel more confident to start their own business instead of working for any other organization (Farooq et al., 2018). Moreover, this study argues that entrepreneurial skills can influence the entrepreneurial behaviour of individuals, which influence the start-up preparation of a new venture. Therefore, initial efforts to develop successful entrepreneurs have focused on identifying the successful entrepreneur's skills and developing those skills to start the business. According to Lyons et al. (2019), entrepreneurship skills include (1) business management (e.g., accounting, finance, marketing), (2) relationship management (e.g., networking capacity, leveraging existing partnerships and resource leveraging) (3) organizational process management (e.g., internal communication, decision making and conflict management (4) transformational management (e.g., creativity, innovation and leadership) which are considered as the essential requirements to become a successful entrepreneur. In this regard, Rosique-Blasco et al. (2016) found that the essential and inherent skills for starting a business are innovation and risk-taking. Further, Rosique-Blasco et al. (2016) showed a strong correlation between entrepreneurship skills and entrepreneurship intention of students. In addition, the study results revealed that entrepreneurial skills such as risk-taking, critical thinking, problem-solving, and innovation are crucial to starting their own business (Reyad et al., 2019). For this reason, universities need to think more about developing students' entrepreneurship skills via education programmes to enhance their entrepreneurship intention and start-up preparation to start their own business. Accordingly, it is hypothesized that:

H1: Entrepreneurship skill is positively and significantly related to start-up preparation.

Entrepreneurship Skill and Entrepreneurship Attitude

Reyad et al. (2019) conducted a study to analyse the relationship between entrepreneurship skills and entrepreneurial attitudes among Bahraini and Egyptian undergraduates. Findings of the study indicated that improving entrepreneurship skills such as risk-taking, critical thinking, problem-solving, innovation, autonomy, and the need for achievement contribute to enhance students' positive entrepreneurship attitude. Farooq et al. (2018) found that entrepreneurial skills positively and significantly affect attitude towards entrepreneurship. In addition to that, Salam et al. (2017) argued that a firm grip on entrepreneurial skills would also be associated with a higher attitude towards entrepreneurship. Fundamentally, developing entrepreneurship skills enables students to find the

solutions to run the business, which can be considered an antecedent factor to determine the entrepreneurship attitude of students. Thus, the second hypothesis for this study is formulated as follows;

H2: Entrepreneurship skill is positively and significantly related to entrepreneurship attitude.

Relationship Between Entrepreneurship Skill and Entrepreneurship Intention

Several studies emphasised the importance of entrepreneurship skills on enhancing entrepreneurship intention (Davidsson and Honig, 2003; Hattab, 2014; Bae et al., 2014; Mamun et al., 2017; Farooq et al., 2018). In general, people who have more self-confidence about their entrepreneurship skills have the entrepreneurship intention than people who lack self-confidence about their entrepreneurship skills. According to Smith et al. (2014), investment in entrepreneurship education programmes at the university level facilitates the accumulation of entrepreneurship skills required to discover and create business opportunities, which promote the outcome of an intention to become an entrepreneur. Furthermore, Martin et al. (2013) found a statistically significant relationship between entrepreneurship education and human capital outcomes, such as entrepreneurship-related knowledge and skills a positive perception of entrepreneurship and intentions. Thus, the third hypothesis for this study is formulated as follows;

H3: Entrepreneurship skill is positively and significantly related to entrepreneurship intention

Entrepreneurship Attitude and Start-Up Preparation

Individuals' positive attitudes towards entrepreneurship can have a more profound influence on starting their own business and becoming successful entrepreneurs (Jones and Jones, 2014). Thus, developing the entrepreneurship attitude among the students is treated as an efficient and effective process to gain the output of the start-up of new businesses. Further, Veciana et al. (2005) conducted an empirical study that suggested a positive and significant relationship between attitude toward entrepreneurship and start-up preparation. Therefore, individuals need to be prepared for entrepreneurship cognitively, affectively, and behaviorally to ensure the right attitude towards entrepreneurship. Individuals who have a positive attitude about entrepreneurship utilize their knowledge and skills to start their business. In general, students with a positive entrepreneurship attitude will scan the environment for business opportunities and then execute their business ideas to start a new business. Based on the above empirical evidence and logical arguments, this review proposes the fourth hypothesis;

Hypothesis 4: Entrepreneurship attitude is positively and significantly related to start-up preparation.

Entrepreneurship Intention and Start-Up Preparation

Based on the theory of planned behaviour, the intention directly links with actual behaviour (Ajzen, 1991). Therefore, entrepreneurial intention represents the theory of planned behaviour's intention construct, whereas start-up preparation represents the behaviour construct (Ajzen, 1991). Krueger et al. (2000) argued that entrepreneurship intention is considered as the crucial factor in determining the start-up preparation of a new entrepreneurial venture since the decision of an individual to become an entrepreneur is considered as voluntary and conscious. In general, when individuals have entrepreneurial intention, they become more committed and willing to engage in preparation works to start a new venture or business rather than being job seekers. Therefore, a person with solid entrepreneurship intention will take the necessary steps to create the entrepreneurial venture or business. A study conducted by Çolakoğlua and Gözükarab (2016) proven that entrepreneurial intention is a significant construct that determines the process of creating ventures. According to the above literature, this review establishes that entrepreneurial intention has a positive relationship with start-up preparation of a business or venture as the fifth hypothesis of this study:

Hypothesis 5: There is a positive relationship between entrepreneurial intention and start-up preparation.

Entrepreneurship Attitude and Entrepreneurship Intention

Linan (2008) revealed that the intention to become an entrepreneur depends on an individual's attitude. A study conducted by Armitage and Conner (2001) has proven that attitude towards entrepreneurship has the highest predictive power for entrepreneurial intention. Attitudes contain three components: affect, cognition, and intention (Robbins and Judge, 2013). Entrepreneurial attitude consists of three aspects such as cognitive aspect (belief in entrepreneurship), affective aspect (positive feeling about the entrepreneurship) and behavioural aspect (intention to be an entrepreneur). These three aspects are critical to determining the entrepreneurship intention of an individual. Further, Mamun et al. (2017) conducted a study and confirmed the positive relationship between entrepreneurship attitude and entrepreneurship intention among university students in Malaysia. Thus, the intention to start a business derives from one person's positive attitude towards entrepreneurship. Based on this logical relationship between attitude and intention, this study hypothesizes that:

Hypothesis 6: There is a positive relationship between entrepreneurial attitude and entrepreneurial intention.

The Mediating Role of Entrepreneurship Attitude on the Relationship Between Entrepreneurship Skill and Start-Up Preparation

Entrepreneurial skills are essential for individuals to involve in the start-up preparation of business (Reyad et al., 2019). Fundamentally, individuals with entrepreneurship skills know how to start and run a business. Further, entrepreneurship attitude is a vital driver of the entrepreneurial start-up

process (Belas et al., 2019). To put it another way, persons must be mentally, affectively, and behaviorally prepared for the entrepreneurial process in order to have the right attitudes. Further, Reyad et al. (2019) emphasized the importance of developing entrepreneurial skills among the students to enhance their positive attitude towards entrepreneurship. In this context, researchers argue that when individuals have confidence in their entrepreneurship skills, they will positively think, feel, and behave toward entrepreneurship, which leads them to engage with the new business start-up process. Based on above argument, researchers formulate the seventh hypothesis of this study.

Hypothesis 7: Entrepreneurship attitude mediates the relationship between entrepreneurship skills and start-up preparation.

The Mediating Role of Entrepreneurship Intention on the Relationship Between Entrepreneurship Skills and Start-Up Preparation

Researchers revealed that universities need to consider more on fostering entrepreneurship skills among the students through entrepreneurship education programmes to boost their start-up propensity (Jones et al., 2017; Olutuase et al., 2020). Further, improving the students' entrepreneurship skills through entrepreneurship education and training boosts their intention to start the business (Fragoso et al., 2019). Further, Mamun et al. (2017) stated that improving entrepreneurship skills will develop entrepreneurship intention among the students. In other words, the start-up intention of students highly depends on their entrepreneurship skills. Furthermore, researchers found that intentions are the best predictor of individual behaviour, and they are also a good predictor of the decision to become an entrepreneur (Krueger and Brazeal 1994; Bird, 1988). Thus, students' entrepreneurial intentions are essential in starting and managing a business (Tomy and Pardede, 2020). In other words, individuals who have entrepreneurship intentions are more likely to start their new venture. Hence, changing the entrepreneurship intention of students through developing their entrepreneurship skills has a significant role in determining the start-up propensity. The above arguments directed the researchers to formulate the eighth hypothesis of this study.

Hypothesis 8: Entrepreneurship intention mediates the relationship between entrepreneurship skills and start-up preparation.

The Mediating Role of Entrepreneurship Intention on the Relationship Between Entrepreneurship Skill and Start-Up Preparation

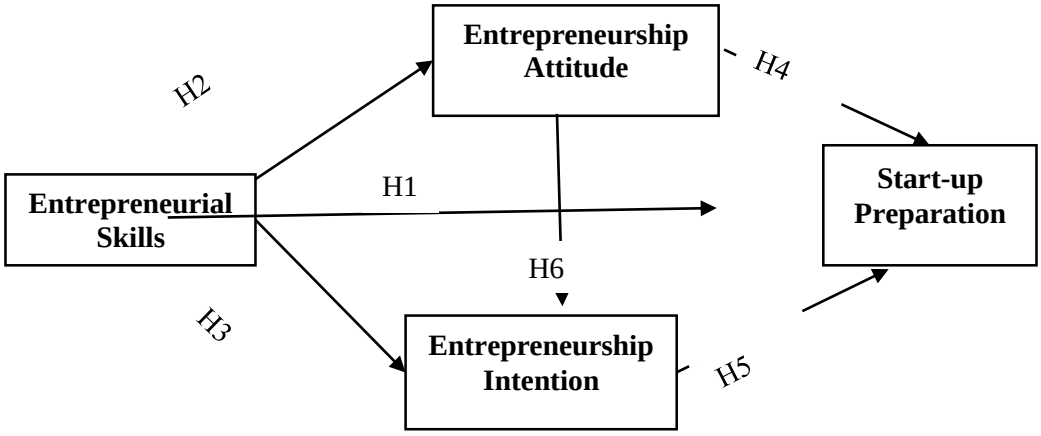
Based on the above-cited pieces of evidence, it is possible to formulate the direct relationship between entrepreneurship skills and start-up preparation. According to Douglas and Shepherd (2002), persons with more entrepreneurial skills have a higher entrepreneurial intention. When the individuals' intention to be an entrepreneur is strong enough, they take action to become entrepreneurs (Frasogo et al., 2019). Hence, it is possible to develop the intention towards entrepreneurship by improving

individuals' entrepreneurship skills, which pave the way to be involved with the start-up process. As outlined above, it is reasonable to conclude that individuals with entrepreneurship skills have an entrepreneurship intention and plan to create their own business or be self-employed. As a result, the following final hypothesis is suggested:

Hypothesis 9: Entrepreneurship intention mediates the relationship between entrepreneurship skills and start-up preparation.

Hence, based on the review, this study proposes a conceptual framework that shows the relationships among entrepreneurship skills, entrepreneurship attitude, and entrepreneurship intention and start-up preparation. The conceptualization of the study is illustrated in Figure 01.

Figure 1: Conceptual Framework



Source: Authors' construction

METHODOLOGY

Study Design

The hypothetic-deductive method was used to achieve the study objectives. The purpose of the study was analytical and predictive as it tested hypotheses. The extent of researchers' interference was minimal because studying the four variables was done when they normally occurred without manipulating or controlling any variable. Furthermore, the study setting was non-contrived as the study was carried out in the natural environment without creating an artificial environment. The research strategy was a survey, as it involved collecting primary data through a self-administered questionnaire. Unit of analysis was individual: undergraduate student reading for Bachelor of Science in Management (B.Sc. in Management) and Bachelor of Business Management (BBM) in selected

universities. The time horizon was cross-sectional as data collection was done at one point to answer the research questions.

Sampling and Data Collection

The empirical data for the current study were collected from selected two universities in Sri Lanka. The total population of this study was all the management undergraduates in selected universities. Out of these, 225 undergraduates were selected as samples to conduct this research using a stratified random sampling method to represent undergraduates belonging to different groups in the selected universities. In addition, students from different disciplines were targeted to facilitate greater variety regarding the fields of study represented in our sample. This study depends on primary data. The data of this study were collected from the respondents through a structured questionnaire. The questionnaire contained questions relating to entrepreneurship skills, attitude, intention, start-up preparation, and demographic information.

Measures

A questionnaire with established measurement scales from prior literature to empirically validate the research model to ensure valid and reliable measures was developped. This study's measure was adapted from established measurements. This study has used an instrument adapted from the past research work of Koh (1996) to measure entrepreneurship skills. Entrepreneurship forms new businesses to produce new ideas in response to identified business opportunities (Uddin and Bose, 2012). Furthermore, entrepreneurship entails taking measured and autonomous risks to benefit the future (Parker, 2004). This aligns with the argument of Uddin and Bose (2012) and Parker (2004), who revealed that innovation and risk-taking were the top skills needed for entrepreneurs. The Cronbach's alpha of entrepreneurship skills is 0.634. It is lower than the cut off rate of 0.70. This instrument had a Cronbach's alpha of 0.634, which is lower than 0.70. However, according to Bowling (2002), an alpha of 0.5 or higher is considered a sign of acceptable internal consistency. Questions measuring entrepreneurship attitude were adapted from Lorz (2011). The instrument had a reasonable degree of reliability with a Cronbach's alpha of 0.782.

Further, a study has used an instrument to measure entrepreneurial intention that consists of seven question items. This instrument had a Cronbach's alpha of 0.873, which is higher than 0.70. Hence, this instrument had good reliability. To measure start-up preparation, ten-question items were used from past research works of Lorz (2011). The instrument had a reasonable degree of reliability with a Cronbach's alpha of 0.943.

Data Analysis Techniques

The quantitative data were analyzed using Structural Equation Modeling (SEM) as it allows the estimation of complex relationships, primarily when the mediating effect exists (Hair et al., 2006). SPSS 20 and AMOS 23 packages were used for the analysis.

FINDINGS OF THE STUDY

The sample profile consists of gender, year of study, and specialization of 225 undergraduates from two selected state universities in Sri Lanka. The frequencies and percentages are shown in Table 2.

Table 2: Sample Profile

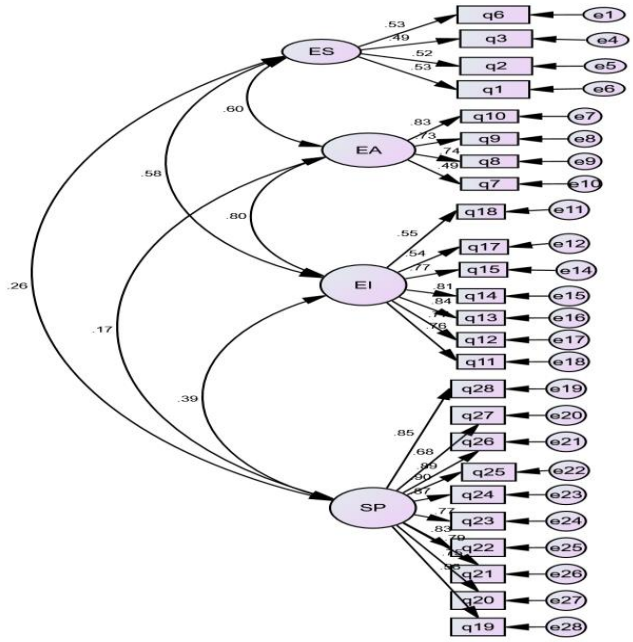
Sample Profile	Category	Frequency	Percentage
Gender	Male	68	30.2
	Female	157	69.8
Year of Study	First-year	51	22.7
	Second-year	89	39.6
	Third-year	62	27.6
	Final year	23	10.2
Field of Specialization	Human Resource Management	37	16.4
	Marketing	28	12.4
	Economics	24	10.7
	Information management	11	4.9
	Accounting and finance	86	38.2
	Project management	39	17.3

Source: Survey Data

Measurement Model

The measurement model "specifies the indicators for each construct, and enables an assessment of construct validity" (Hair et al., 2006, p.733). Based on the conceptual model, there are four latent variables: entrepreneurship skills (ES); entrepreneurship attitude (EA); entrepreneurship intention (EI) start-up preparation (SP). The final measurement model was obtained after removing three items (e2, e2 and e13) with regression weights less than 0.5 at two stages. The goodness of fit (GOF) measures of chi-square, goodness-of-fit index (GFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA) were used to evaluate the measurement model. The final measurement model achieved a good level of fit having a chi-square = 589.135, CMIN/ df = 2.190, GFI = 0.829, CFI = 0.904 and RMSEA = 0.73.

Figure 2: Measurement Model



Reliability and Validity of the Study

Reliability was measured using Cronbach's alpha (alpha values > 0.7) and composite reliability (values > 0.6). Convergent and discriminant validity were assessed using Average Variance Extracted (AVE) (values > 0.5) and Squared Multiple Correlation (SMC) and the AVE matrix, respectively. As

shown in Table 3, all other values are above the agreed-upon lower limit except for the AVE of entrepreneurship skill. Entrepreneurship skill (0.26) has lower convergent validity (AVE) but, maintaining satisfactory composite reliability levels. Hence, the reliability and validity of the measurement model are assured. Content validity refers to the extent to which the measurement device, in our case, the measurement questions in the questionnaire, provides adequate coverage of the investigative questions (Saunders et al., 2009). More than two question statements were developed for each of the elements identified from the literature, and therefore each of the four instruments contained an adequate degree of content validity. Factor analysis was used in order to measure the construct validity of the instruments, and it is a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of the items are most appropriate for each dimension (establishing construct validity) (Sekaran and Bougie, 2013). Under the KMO & Barett's Test of Sphericity, all the four variables were recorded above 0.5. Kaiser (1974) recommends that the accepted index of KMO & Bartlett's Test of Sphericity should be over 0.5

Table 3: Reliability and Validity Summary

Variable	***Mean***	***SD***	***Cronbach's Alpha***	***CR***	***AVE***	***ES***	***EA***	***HI***	***SP***
Entrepreneurship Skills (ES)	3.81	0.68	*0.634*	*0.75*	*0.26*	*0.26*			
Entrepreneurship Attitude (EA)	4.11	0.75	*0.782*	*0.87*	*0.50*	*0.36*	*0.50*		
Entrepreneurship Intention (EI)	3.77	0.89	*0.873*	*0.73*	*0.52*	*0.34*	*0.64*	*0.52*	
Start-up preparation (SP)	3.03	1.08	*0.943*	*0.80*	*0.63*	*0.07*	*0.03*	*0.15*	*0.63*

Source: Survey Data

Table 3 shows the descriptive statistics of the study. According to Table 3, a high level of entrepreneurship skills, entrepreneurship attitude and intention, and start-up preparation exist among the undergraduates. The results also imply that a moderate level of start-up preparation exists among the undergraduates in selected universities with mean scores from 3.03 to 4.11 of 5.

Structural Model

The structural model indicates the hypothesized relationships among the latent variables. Four structural models were drawn to test the direct relationships (H1to H6) and the mediators' effect (H7,

H8 and H9). The statistical analysis supported all the hypotheses. Table 4 gives the findings of the hypotheses testing along with the GOF measures of the structural models.

Table 4: Path Analysis

Hypotheses			**GOF Measures of the Structural Model**				
Path	Beta value	P	Ch1-square	CMIN/df	GFI	CFI	RMSEA
(H1)ES → SP	0.179	0.075	764.750	2.236	0.802	0.881	0.074
(H2) ES→EA	0.617	0.000					
(H3) ES→EI	0.210	0.031					
(H4) EA→SP	0.462	0.002					
(H5) EI → SP	0.669	0.000					
(H6) EA → EI	0.657	0.000					
(H7) ES → SP	0.306	0.017	356.572	2.161	0.863	0.919	0.72
ES→ EA	0.621	0.000					
EA→ SP	0.015	0.896					
(H8) ES→ SP	0.070	0.524	600.930	2.433	0.812	0.884	0.80
ES→EI	0.613	0.000					
EI→ SP	0.375	0.000					
(H9)EA→ SP	0.399	0.004	556.759	2.729	0.811	0.893	0.888
EA→ EI	0.787	0.000					
EI→ SP	0.727	0.000					

Note: Entrepreneurship Skills (ES); Entrepreneurship Attitude (EA); Entrepreneurship Intention (EI)

Start-up preparation (SP)

Significant at 10% level

The direct relationships measured by H1 (entrepreneurship skill and start-up preparation), H2 (entrepreneurship skill and entrepreneurship attitude), H3 (entrepreneurship skill and entrepreneurship intention), H4 (entrepreneurship attitude and start-up preparation), H5 (entrepreneurship intention and start-up preparation) and H6 (entrepreneurship attitude and entrepreneurship intention) and findings supported those relationships. In addition, bootstrap analysis was used to examine the mediating effects (H7 to H9). The findings of mediation analysis are illustrated in Table 5. The findings of the study revealed that entrepreneurship attitude partially mediated the relationship between entrepreneurship skills and start-up preparation. In addition, the study's findings revealed that the relationship between entrepreneurship skills and start-up preparation was fully mediated by entrepreneurship intention. Finally, the mediation analysis of the study also revealed that entrepreneurship intention partially mediates the relationship between entrepreneurship attitude and start-up preparation.

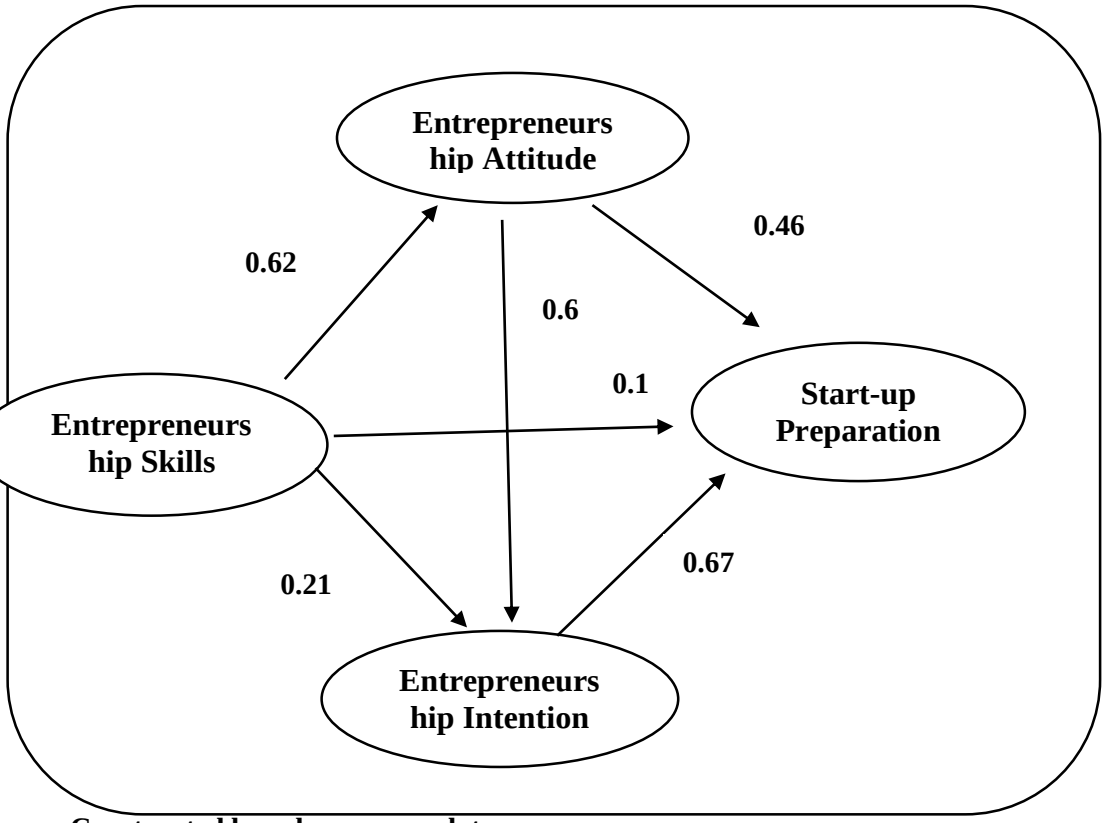
Table 05: Mediation Analysis

Direct Effect			**Indirect effect**				**Mediation**
	β	P	β	P	Upper bound	Lower bound	
ES-EA-SP	0.306	0.039	0.009	0.908	0.103	-0.147	Partial mediation
ES-EI-SP	0.070	0.585	0.230	0.001	0.370	0.138	Full mediation
EA-EI-SP	0.399	0.001	0.572	0.001	0.796	0.400	Partial mediation

Significant at 10% level

Source: Survey data

F*igure 3: Structural model with standardized parameter estimates*



Source: Constructed based on survey data

DISCUSSION

This study examines the relationships among entrepreneurship skills, entrepreneurial attitude, entrepreneurship intention and start-up preparation. Over the years, government, policymakers and Universities and academicians have put their effort to improve entrepreneurship to ensure economic prosperity and social stability. Therefore, the study's empirical findings contribute to understanding the relationships among the study variables in undergraduates among the selected universities in Sri Lanka.

The study's first finding indicates a significant and positive relationship exists between entrepreneurship skills and start-up preparation. This result provides support to the first hypothesis of the study. The current study suggests that when students receive appropriate and adequate

entrepreneurship skills through the entrepreneurship education programmes, it directly contributes to increasing their start-up preparation for the new venture or business. Innovation and risk-taking are considered as vital skills for entrepreneurs. Students with the appropriate entrepreneurship skills are arguably indispensable to start up and manage enterprises effectively. If students have entrepreneurship skills, they will slightly start thinking about their future business ideas and working on them. This finding of the study is consistent with the results of previous studies (eg., Rosique-Blasco et al., 2016; Reyad et al., 2019), which suggested that entrepreneurship skills are positively related to start-up preparation.

The study's second finding indicates a significant and positive relationship between entrepreneurship skills and entrepreneurial attitude. In other words, entrepreneurship skills lead to a more excellent entrepreneurial attitude. This result provides support to the second hypothesis of the study. Further, possession of entrepreneurship skills has a psychological effect on the entrepreneurship attitude of the students. Therefore, the current research suggests that it is essential to develop entrepreneurship skills among the students to enhance their positive attitude towards entrepreneurship. The present study's finding matches with conclusions of the recent research (Salam et al., 2017; Farooq et al., 2018). The researchers discovered through their research works that entrepreneurship skills are one of the essential factors which lead to improving the positive attitude towards entrepreneurship.

The study's third finding indicates a significant and positive relationship between entrepreneurship skills and intention. This result provides support to the third hypothesis of the study. Findings of the study suggested that possession of entrepreneurship skills increases students' self-confidence and self-esteem, which ultimately leads to accelerating their entrepreneurship intention. Further, developing entrepreneurship skills via entrepreneurship programmes makes them more committed, motivated and empowered students toward entrepreneurship. Hence, universities need to create graduates with adequate entrepreneurial competencies because entrepreneurship skills could play a pivotal role in yielding entrepreneurship intentions. This finding coincides with prior literature, which reports that students with entrepreneurship skills tend to have more entrepreneurship intention (Martin et al., 2013; Smith et al., 2014).

The fourth finding of the study indicates a significant and positive relationship that exists between entrepreneurship attitude and start-up preparation. This result provides support to the fourth hypothesis of the study. This study argues that students' positive attitudinal and behavioural changes towards entrepreneurship are essential to making them as entrepreneurs. Nowadays, in facing economic and social challenges, developing positive attitudes towards entrepreneurship among graduates is paramount. In other words, it is possible to encourage the students to involve with preparation works for their future business or venture by positively shaping their attitudes towards

entrepreneurship. This finding of the study is consistent with the results of previous studies, which revealed that entrepreneurship attitude is positively related to start-up preparation (Veciana et al., 2005; Jones and Jones, 2014).

The study's fifth finding indicates a significant and positive relationship between entrepreneurship intention and start-up preparation. This result provides support to the fifth hypothesis of the study. The current research suggests that students with entrepreneurship intentions are willing to put more effort to start their own business. In other words, entrepreneurship intention is treated as one of the important contributing factors in creating a new venture or business. Furthermore, students with a high entrepreneurship intention take tiny steps to formulate their future business during the undergraduate period. This finding coincides with prior literature, which reports that students with entrepreneurship intentions tend to exhibit more start-up behaviours for their new venture or business (Çolakoğlua and Gözükara, 2016).

The sixth finding of the study indicates a significant and positive relationship that exists between entrepreneurship attitude and entrepreneurship intention. This result provides support to the sixth hypothesis of the study. The current research suggests that when employees have an entrepreneurship attitude, it directly increases their entrepreneurship intention. This study provides empirical evidence for the theory of planned behaviour. A student who intends to start their own business is equipped with a positive attitude towards entrepreneurship. Hence, entrepreneurship attitude can be treated as the critical driver of entrepreneurship intention. This finding supports the previous studies, which suggested that it is possible to enhance the entrepreneurship intention of students through developing a positive entrepreneurship attitude (eg., Armitage and Conner, 2001; Manun et al., 2017).

The statistical results of the mediation analysis revealed that entrepreneurship attitude significantly mediated the relationship between entrepreneurship skills and start-up preparation. These results reinforce the importance of entrepreneurship skills via entrepreneurship attitude as vehicles to increase start-up preparation of students. This research has a significant implication: institutions should explore boosting students' entrepreneurship skills in order to improve their positive attitude toward entrepreneurship, which will drive them to focus more on start-up preparatory work for their future business or venture. Further, the study's overall results keep entirely and empirically confirm the Theory of Planned Behavior, which suggested that attitude is a powerful predictor of intention.

Empirical findings of the study suggested that entrepreneurial intention plays a mediator role in the relationship between entrepreneurship skills and start-up preparation. This finding aligns with the theoretical argument of the study. As a result, students' entrepreneurial intention may be enhanced by improving their entrepreneurship skills, which motivate them to participate in the start-up preparation of a new venture or business. Furthermore, theoretical evidence of the study suggested that entrepreneurial intention mediates the relationship between entrepreneurship skills and start-up

preparation. Thus, the empirical findings of the study also support what was hypothesized in the study.

The current study revealed that entrepreneurship intention plays a mediator role between entrepreneurship attitude and start-up preparation. This finding suggests that developing students' entrepreneurship attitude contribute to promoting their entrepreneurship intention. Finally, these trends lead them to involve with start-up preparation toward new business or venture. Importantly, these results reinforce that entrepreneurship attitude is essential in driving entrepreneurship intention and start-up preparation.

CONCLUSION

The empirical data for this study was collected from undergraduates in selected two universities in Sri Lanka. This study concluded that positive and significant relationships exist among entrepreneurship skills, entrepreneurship attitude, entrepreneurship intention, and start-up preparation. Further, the relationship between entrepreneurship skills and start-up preparation is mediated by entrepreneurship attitude and entrepreneurship intention. Similarly, entrepreneurship intention mediates the relationship between entrepreneurship attitude and start-up preparation. Finally, this study developed a structural equation model to show the relationships among entrepreneurship skills, entrepreneurship attitude, and entrepreneurship intention and start-up preparation.

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