Modelling youth entrepreneurship intentions: A ten-year research*

*Dejan Djordjevic, Dragan Cockalo, Srdjan Bogetic, Mihalj Bakator***

Abstract

Entrepreneurship can have a crucial role in economic development. Youth entrepreneurship has even a greater role in economic growth. The underlying issues are the high youth unemployment rates in developing but also in developed countries as well. Improving the entrepreneurial climate and providing a "fertile" ground for venture creation is almost an imperative for increasing the number of young entrepreneurs and the number of entrepreneurs overall. In this paper, the results of an extensive, cross-sectional study conducted over ten-years, are presented. The study includes 5670 respondents – high school and university students from Serbia. The goal was to determine the predictors of youth entrepreneurship intentions in the domain of venture creation.

Keywords: youth entrepreneurship, intentions, model, attitudes, students
JEL Codes: L26, C49, C59

1. Introduction

In emerging economies, entrepreneurship possesses the "drive" that can push the economy forward and it creates a suitable climate for economic growth (Lamrani et al. 2016; Bakator/Đorđević/Ćoćkalo/Nikolić/Vorkapić 2018). Small and medium-sized enterprises (SMEs) are a crucial component of economic prosperity. This further indicates that entrepreneurship (which is not always the same concept as SMEs) has a positive effect on economic growth. Entrepreneurship, as a mechanism, represents a carrier of employment, innovation and development. As innovation is a crucial aspect of gaining competitive advantage on the market (Slavec/Gomezel/Aleksić 2020), it can be argued that activities which nurture innovations, such as entrepreneurship, have an important role in achieving competitiveness. Entrepreneurship can include actions, which, not

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only bring value to the organizations and customers, but also could enhance the exchange of value on a macro-level. This can further result in other positive outcomes, such as productivity, job creation, and economic growth.

In the research of Acs, Desai, and Hessels, (2008) it was noted that entrepreneurial activities can depend on economic development. Therefore, entrepreneurship differs across countries. Man, Lau, and Chan (2002), discussed that increasing entrepreneurial activities and developing entrepreneurial competencies are more important, or better say, play a more important role than directly providing the necessary resources, infrastructure, and environment to the potential entrepreneur.

Furthermore, the concept of youth entrepreneurship is even more crucial, as youth unemployment rates are a present issue across countries, and by starting their own business, they can positively affect these unemployment rates (Ćoćkalo/Đorđević/Nikolić/Stanisavljev/Terek 2017). When it comes to analysing entrepreneurial intentions there are numerous studies which analyse intentions and attitudes of potential entrepreneurs (Soomro/Shah, 2015), education and entrepreneurial intentions (Dhaliwal 2010; Millman/Li/Matlay/Wong 2010), and childhood development effects on entrepreneurial intentions (Top/Çolakoğlu/Dilek 2012). As youth entrepreneurship is one of the core solutions for reducing youth unemployment rates (Ćoćkalo et al. 2017), focus was given to entrepreneurial intentions as they can have a significant effect on future entrepreneurial activities (Wilson/Kickul/Marlino 2007; Thompson 2009).

The current body of literature covers a large segment of youth entrepreneurship. However, the relation between entrepreneurship attitudes and entrepreneurial intentions among students over a long period time in a transitional economic environment is not fully investigated. Various meta-analyses were conducted with the goal to fill this gap in literature. This present paper fills this gap as it presents the results of a cross-sectional study conducted in a ten-year period. The study included 5670 respondents – high school and university students from the two biggest universities in Serbia: the University of Belgrade and University of Novi Sad. In addition, students from the Belgrade Business Academy of Vocational Studies also participated in the research. By filling this gap, there would be a significant reference point in the domain of students' attitudes and its impact on entrepreneurial intentions. The paper focuses on students' attitudes and their influence on intentions to start their own business. In addition, the paper analyses the potential impact of other factors (experience of control, market assessment, and information) with the goal to provide additional context to the impact of attitudes on intentions. Now, it is important to note that this current research analyses entrepreneurship in the context of venture creation and not corporate entrepreneurship. Further, the following research question is proposed:

How attitudes, experience of control, market assessment, and information affect youth entrepreneurial intentions?

In sum, the paper consists of four main sections (not including the *Introduction* and *Conclusion* sections). The first section provides a theoretical background and research framework. The second section presents the research methodology in more detail. The research results are presented in the third section. Next, in the fourth section, the research results and research questions are discussed. At the end, conclusions are drawn, the weaknesses of the paper are addressed, and the possibility for future research is discussed.

2. Theoretical background and hypothesis development

2.1. Youth entrepreneurship and economic growth

Entrepreneurship can be defined as set of actions, which are conducted by individuals or groups, with the main goal of creating new opportunities that are not part of already established organizations (Carree/Thurik 2010). In the same study, it was argued that entrepreneurship is tied to individuals, and that its potential on a macro-economic level is low. A more established contrast to this argument is that entrepreneurship positively affects economic growth (Jones/Iredale 2014; Boettke/Coyne 2015).

Further, youth entrepreneurship plays a crucial role in decreasing youth unemployment rates (Mariana-Cristina 2014). In developed countries, it was noted that entrepreneurship has a positive effect on economic development as new employment opportunities may arise and it contributes to the international trade (Athayde 2009). These positive effects of youth entrepreneurship on economic growth is also present in developing countries. The importance of youth entrepreneurship is evident when the seriousness of youth unemployment is observed. Namely, youth unemployment is dependent on the status of the economy, and more importantly, SMEs were the main "carriers" of youth employment (Mariana-Cristina 2014).

As noted previously, economic growth is affected by entrepreneurial activity. There is the argument that entrepreneurs may be the drivers of economic growth through innovation, but also, an entrepreneur can be the identifier of profitable ideas, and activities, which are already present and successful on the market (Dimova/Pela 2018). The majority of the conducted studies in this domain support this notion.

Now, after analysing previous findings, it is evident that youth entrepreneurship could reduce youth unemployment rates, thus economic growth could be the result of youth entrepreneurship. It is interesting to note, that in every economy, a so-called “filter” is present, which is consisted of policies, culture, and society norms (Saraiva/Gabriel 2016). Therefore, it can be argued that youth

entrepreneurship attitudes and intentions are complex constructs, thus further analysis is required.

2.2. Youth entrepreneurship attitudes and intentions

In the work of Soomro and Shah (2015), it was discussed that the development of attitudes are the result of attitudes towards behaviour and that business intentions are best predicted by attitudes. This current research analyses attitudes, experience, market assessment, and information as influential factors. Attitudes in the context of youth entrepreneurship includes affinity towards venture creation. Attitudes can be a strong predictor of potential entrepreneurial intentions (Dioneo-Adetayo 2006). Attitudes within this current research are viewed and analysed as entrepreneurship-friendly attitudes. These entrepreneurship-friendly attitudes are affected by various factors (culture, education, creativity etc.), and it can be a strong indicator of intentions for starting own business (Giacomin et al. 2010; Walter/Block 2016). From here, the influence of attitudes on intentions to start own business can be argued. Therefore, the first hypothesis is proposed:

H1: Students' attitudes towards entrepreneurship is in a positive relation with their intentions to start their own business.

Demographic profile, entrepreneurial education, and social background don't necessarily affect students' decision on starting their business, but rather occupational choices and motives are (Grüner/Neuberger 2006; Franco/Haase/Lautenschläger 2010; Oosterbeek/Ijsselstein 2010; Testa/Frascheri 2015; Wegner/Thomas/Teixeira/Maehler 2019). In the research of Lévesque and Minniti (2006), it was noted that younger individuals are more likely to start their own business compared to older individuals. However, young individuals may see starting their own business as a risk. This due to the fact that entrepreneurial actions are mainly characterized by uncertainty due to dynamic markets and changing trends (Kuechle/Boulu-Reshef/Carr 2016). People in general are more likely to think about starting their own business if they acquired sufficient knowledge, experience, and resources (Hulsink/Koek 2014; Audretsch/Belitski/Caiazza/Lehmann 2020).

Close social relationships (parents, or other close family member) can strongly influence youth entrepreneurship attitudes (Stamboulis/Barlas 2014). In addition, it was found that work experience in a business, or experience in attempting to start a business, as well as entrepreneurship education positively affects youth entrepreneurship (Bignotti/Le Roux 2020). When it comes to experience, previous findings indicate that the ownership of a business by a family member, positively affects an individual's attitude towards owning a business (Tarling/Jones/Murphy 2016). Staniewski (2016) noted that an entrepreneur in the family, managerial experience, unique knowledge of employees, and unique

knowledge of the entrepreneurs themselves could be considered as predictive indicators to entrepreneurial success. Exposure to a family member that owns a private business can positively affect intentions to start own business (Farrukh 2017). Based on these notions the second hypothesis is proposed:

H2: Experience of control (family member business owner) is in a positive relation with intentions to start own business.

Socio-cultural background was found to have an effect on entrepreneurial intentions in some degree. Collective values are formed through influence of social circles, and these may further affect entrepreneurship morals, and ethics (Hueso/Jaén/Liñán/Basuki 2020).

Another important factor which may affect students' entrepreneurial intentions are national culture (Shirokova/Tsukanova/Morris 2017; Strauß/Greven/Brettel 2020). National culture affects students' entrepreneurial intentions as students have to face environmental factors when it comes to starting and running own business (Leković/Berber 2019; Rajković Rajković/Nikolić/Ćoćkalo/Terek/Stojanović/Kovačić 2020). Similarly, there are other macro-environmental variables, which affect entrepreneurial intentions. This includes GDP, ease of doing business, and corruption levels (Griffiths/Kickul/Carsrud 2009).

It is important to add, that knowledge itself is not enough for creating value. The ability to detect opportunities on the market positively affects entrepreneurial activities. Market assessment can be a deciding factor when it comes to youth entrepreneurship activities (Olugbola 2017). The conditions in the external environment can significantly affect entrepreneurial activity. Market assessment is the key component of market-driven and opportunity driven entrepreneurship. In addition, these external conditions and their evaluation or perception can affect intentions to start own business (Ali/Kelley/Levie 2019). In order to identify the potential influences of the noted factors, two additional hypotheses are proposed, where the influence of market assessment and information influence is noted:

H3: Market assessment (opportunity perception) is in a positive relation with intentions to start own business.

H4: Information (awareness of incentive means) is in a positive relation with intentions to start own business.

The noted findings provide a better understanding on how complex entrepreneurial intentions are. These entrepreneurial intentions don't always translate into action, which may be due one or more of the discussed factors (Smallbone/Welter 2012; Shirokova/Osiyevskyy/Bogatyreva 2016). This current research addresses the influence of attitudes and other factors on entrepreneurial

intentions in transitional conditions. The research model is presented on Figure 1.

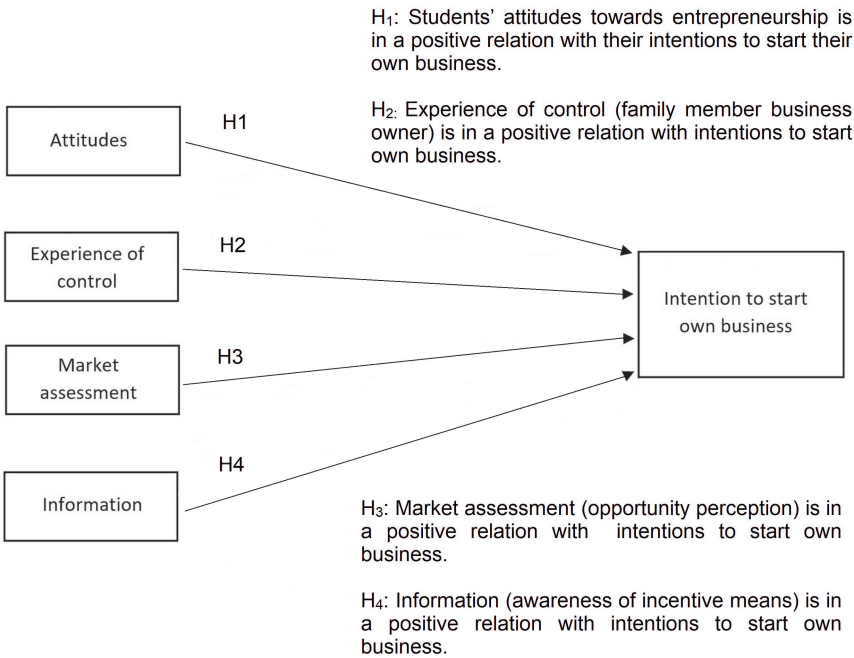

Figure 1. Model of attitude, experience, market assessment and information influence on intention to start own business

In the next section, the research methodology is presented. Details on the sample size, survey items, economic situation in Serbia, statistical tools, and the observed variables are provided.

3. Methodology

3.1. Sample

The research included **5670** respondents, from which 38.8 % were male, and 61.2 % were female. The sample is cross-sectional (different sample each year) and each year an independent survey was conducted. The respondents were high school students and university students enrolled in undergraduate and graduate management courses, and business courses. The average age of the respondents is 22. The research was conducted over a period of **ten years**, starting in 2009 and the latest data is from 2018. The significance of the sample comes from the sheer number of respondents, and from the fact that the respondents are enrolled in one of the two biggest universities in Serbia. In addition, students from the Belgrade Business and Arts Academy of Applied Studies also participated in

the study. There was a randomness component in the sample selection process. However, the data analysis confirms that the sample is suitable for this research. It is important to note that current youth unemployment rates in Serbia are not favourable, but they are better compared to earlier years. Low youth employment rates in Serbia may be the result of an inadequate socio-economic and political environment (Ćoćkalo et al. 2017; Ćoćkalo/Đorđević/Nikolić/Stanisavljev/Terek 2018).

3.2. Constructs and survey design

The data for this current study was collected via structured survey. The survey addressed factors, which affect youth entrepreneurial behaviour including intentions, attitudes, market dynamics, entrepreneurship awareness and social environment.

The main observed constructs of the research are:

- **Attitudes:** In this research, attitudes refer to the interest in entrepreneurship activities, as well as to the mind set that favours private enterprises over public enterprises. As the respondents are students of management and business, the education factors are inevitably integrated. This is not an issue, as entrepreneurial education can enrich students' attitudes when it comes to venture creation (Stamboulis/Barlas 2014).
- **Intentions:** Intentions in this research are observed as conscious awareness of an individual that he or she will launch a new business venture in the future. By studying intentions rather than behaviour directly, the bias of individual situational factors (already owning a business) are avoided (Ojiaku/Nkamnebe/Nwaizugbo 2018).
- **Experience of control:** Experience of control in this study includes the existing experience in the domain of business ownership (family member), or experience in venture creation. Experience has been found as an influential factor on youth entrepreneurship activities (Kvedaraite 2014; Sharma/Madan 2014)
- **Market assessment:** Market assessment in this research involves the respondents' perception of the Serbian market and factors such as competition, idea for a product that could be successfully marketed, and the severity of market limitations (Olugbola 2017).
- **Information:** This variable is observed as information about incentive means, and possible positive outcomes from venture creation. Access to valuable information has been found to positively affect entrepreneurship in developing countries (Okocha/Eyiolorunshe/Idiegbeyan-ose/Aregbesola/Owolabi 2019).

The validity, and reliability of the above noted and observed constructs/variables, are based on the existing body of literature. In previous studies, causal

relations are found between these variables. However, not all variables are observed at once. In this current paper, the focus is the impact of attitudes on intentions to start own business, while the other variables are analysed in order to obtain a more "complete picture" and to provide an adequate context for the conducted research. The survey items are presented in Table 1.

Table 1. Survey items

Question	**Items within the question**	
Gender	o Male o Female	
Education	o High school o Bachelor degree o Master degree	
VARIABLE: Experience of control		
What are your parents' occupation?	**Father** o employee in a public enterprise o employee in a private enterprise o has own business o farmer o retired o unemployed	**Mother** o employee in a public enterprise o employee in a private enterprise o has own business o farmer o retired o unemployed
What knowledge and skills do you lack for owning and managing a business (check up to three answers)	■ Management basics ■ Marketing basics ■ Entrepreneurship and small business basics ■ Accounting basics ■ Computer skills ■ Foreign languages ■ Business communication ■ Other	
VARIABLE: Attitudes		
What does private business mean to you? (check up to three answers)	o Challenge o Risk and uncertainty o Satisfaction and self-proving	
The working environment in a private enterprise is better compared to public jobs (check up to three answers)	☐ I agree ☐ I mostly agree ☐ I don't know ☐ I mostly disagree ☐ I disagree	
VARIABLE: Intention		
Would you start your own business?	■ Yes ■ No	

If not, what are the reasons for not starting your own business? (check up to three answers)	■ I don't have the right idea ■ I don't have enough knowledge ■ Lack of financial resources ■ Lack of leadership experience ■ Insecure about own abilities ■ Uncertain political and economic situation ■ Lack of good associates with who I would start a business ■ I am not interested ■ Other
VARIABLE: Information	
With what kind of resources would you start your business?	☐ Private – own ☐ Government ☐ Bank loans ☐ Associated resources
Are start-up loans from business banks affordable for young entrepreneurs?	■ Yes ■ No
Are aware of the existence of incentive means* for starting own business? (*incentive means for new entrepreneurs)	■ Yes ■ No
VARIABLE: Market assessment	
Is there a stimulating environment in Serbia for starting own business?	■ Yes ■ No
What are the biggest limitations for starting own business? (up to three answers)	o Lack of financial resources o Limited market o Unstable political and economic situation o Disloyal competition o High tax rates o Other *dumping, false advertising, rumour mongering, unauthorized substitution.
How should the government stimulate the young to start their own business? (check up to three answers)	■ Affordable loans ■ Education ■ Better laws and regulation of youth entrepreneurship ■ Development of new business centres and incubators ■ Market regulation ■ Promoting the concept of youth entrepreneurship ■ Other

The survey items presented in Table 1. were evaluated with a binary system where an answer within an item was given the value **1** and a non-marked answer within an item was marked with a **0.** This was done in order to adequately integrate and effectively derive the values from the survey items. These obtained

binary values (1,0) were afterwards statistically analysed. It is important to note that for some questions multiple answers (up to three) were allowed.

Under the Attitudes variable the item regarding the working environment in private enterprises or public jobs included qualitative Likert-scale-type answers including: *I agree, I mostly agree, I don't know, I mostly disagree, I disagree*. These were converted into quantitative values in accordance with a 5-point Likert-scale, thus the values are 5, 4, 3, 2, and 1 respectively. As the other variable items were evaluated through a binary values (1,0), the noted ordinal values were converted into binary one where the values 1 and 2 equal to 0, while the values 3, 4, and 5 equal to 1. For the other variables and items, where multiple answers were allowed, a selection of an answer was valued as 1, while a non-selected answer was valued as 0. From here, the sum variables were derived and further statistical data analysis was conducted.

3.3. Data analysis

The data was analysed with descriptive statistics, binary logistic regression. The logistic regression model was used over the probit model, as the probit model is based on the assumption of normal errors, while the logistic model is based on the assumption of extreme type errors. It was evaluated that the logistic is more adequate for the collected data, compared to the probit model. The data was modelled with structural equations where the model's significance was evaluated through several indicators such as Comparative Fit Index – CFI; Tucker-Lewis Index – TLI; Standardized Root Mean Square Residual-SRMR; and Root Mean Square Error of Approximation- RMSEA. A good model fit is expected at 0.90 and higher for CFI and TLI, and values lower than 0.06 or 0.08 for the RMSEA (Bollen 1989; Hu/Bentler 1999). In Table 2. the summary of the methodology is presented. The goodness of fit test results are presented later in the paper, in the Results section.

Table 2. Research methodology summary

Research metric	Detail
Number of respondents	5670
Research duration	2009–2018
Respondents	Students enrolled into management and business courses at the University of Novi Sad, University of Belgrade, and the Belgrade Business Academy of Vocational Studies
Data collection process	Survey (details on the survey items are presented in Table 2. along with descriptive statistics)

Research metric	Detail
Tools used to evaluate the obtained data	☐ descriptive statistics ☐ binary logistic regression ☐ data modelling with: – Comparative Fit Index – Tucker-Lewis Index – Standardized Root Mean Square Residual – Root Mean Square Error of Approximation

4. Results

The results of the descriptive statistics are presented in Table 3.

Table 3. Results of the descriptive statistics

Question	Most frequent answers (due to multiple answer by one respondent the sum of % may exceed 100)	
VARIABLE: Experience of control		
What are your parents' occupation?	**Father** o employee in a public enterprise (12 %) o employee in a private enterprise (34 %) o has own business (16 %) o farmer (6 %) o retired (15 %) o unemployed (10 %) o no answer (7 %)	**Mother** o employee in a public enterprise (18 %) o employee in a private enterprise (30 %) o has own business (9 %) o farmer (4 %) o retired (12 %) o unemployed (23 %) o no answer (4 %)
What knowledge and skills do you lack for owning and managing a business (check up to three answers)	■ Management basics (14 %) ■ Marketing basics (11.9 %) ■ Entrepreneurship and small business basics (29.8 %) ■ Accounting basics (24.6 %) ■ Computer skills (6.2 %) ■ Foreign languages (29.3 %) ■ Business communication (18.4 %) ■ Other (1.9 %)	
VARIABLE: Attitudes		
What does private business mean to you? (check up to three answers)	o Challenge (48 %) o Risk and uncertainty (43 %) o Satisfaction and self-proving (43 %)	
The working environment in a private enterprise is better compared to public jobs (check up to three answers)	☐ I agree (23.1 %) ☐ I mostly agree (20.8 %) ☐ I don't know (15.9 %) ☐ I mostly disagree (23.4 %) ☐ I disagree (16.7 %)	

VARIABLE: Intention	
Would you start your own business?	■ Yes (79.1 %) ■ No (20.9 %)
If not, what are the reasons for not starting your own business? (check up to three answers)	■ I don't have the right idea (23.4 %) ■ I don't have enough knowledge (14.3 %) ■ Lack of financial resources (43.7 %) ■ Lack of leadership experience (18.9 %) ■ Insecure about own abilities (5.3 %) ■ Uncertain political and economic situation (37.6 %) ■ Lack of good associates with who I would start a business (15.1 %) ■ I am not interested (14.5 %) ■ Other (1.5 %)
VARIABLE: Information	
With what kind of resources would you start your business?	☐ Private – own (65.9 %) ☐ Government (11.2 %) ☐ Bank loans (8.9 %) ☐ Associated resources (14.2 %)
Are start-up loans from business banks affordable for young entrepreneurs?	■ Yes (43.8 %) ■ No (56.1 %)
Are aware of the existence of incentive means* for starting own business? (*incentive means for new entrepreneurs)	■ Yes (43.1 %) ■ No (56.9 %)
VARIABLE: Market assessment	
Is there a stimulating environment in Serbia for starting own business?	■ Yes (16.2 %) ■ No (83.8 %)
What are the biggest limitations for starting own business? (up to three answers)	■ Lack of financial resources (77.5 %) ■ Limited market (26.4 %) ■ Unstable political and economic situation (76.3 %) ■ Disloyal competition (19.2 %)* ■ High tax rates (56.5 %) ■ Other (0.6 %) *dumping, false advertising, rumour mongering, unauthorized substitution.
How should the government stimulate the young to start their own business? (check up to three answers)	■ Affordable loans (71.3 %) ■ Education (62.5 %) ■ Better laws and regulation of youth entrepreneurship (40.7 %) ■ Development of new business centres and incubators (21.0 %) ■ Market regulation (37.4 %) ■ Promoting the concept of youth entrepreneurship (30.9 %) ■ Other (0.5 %)

Based on the descriptive statistics, the students noted that the limitations for entrepreneurial activities include lack of financial resources (77.5 %); limited market (26.4 %); unstable political and economic situation (76.3 %); disloyal competition (19.2 %); high tax rates (56.5 %); and other (0.6 %). It is important to add that multiple answers were acceptable, thus the percentage of the answers does not equal to 100 %.

Furthermore, when it comes to student's attitudes and experiences with private business in the family the binary logistic regression model is statistically significant
(χ^2= 517,51; df =6; p<.001). It is shown that every predictor is statistically significant. These results (Appendix A) indicate that older respondents are more ready to start their own business. This further indicates that predicting **the intention** to start own business can be based on age. Respondents who think that private business is more successful than other types of business are more likely to intend to start their own business. Respondents who think that private business is uncertain and non-profitable are less likely to intend to start their own business. Respondents who think that the working conditions in private enterprises are better than in other types of business are more likely to intend to start their own business. Interestingly, respondents who has someone in their family who owns a private business are LESS likely to intend to start their own business.

When it comes predicting students' intentions based on the awareness of incentive means and attitudes on the entrepreneurial environment in Serbia the binary logistic regression model is statistically significant (χ^2= 237,45; df =6; p <.001). These results (Appendix B) indicate that respondents who think that start up loans from business banks are affordable are MORE likely to intend start their own business. Respondents who are familiar with incentive means for starting own business are LESS ready to start their own business. Interestingly, students who are aware of incentive means are less likely to start their own business. The reason behind this could be the mistrust in government policies, or the overall political and economic uncertainty has a stronger influence compared to the incentive means for starting own business.

Next, experience of control, attitudes, market assessment and information were analysed as influencing factors on the intention to start own business, as this approach was suggested by Boissin, Favre-Bonté, and Fine-Falcy (2017). In Table 4., the values of the standardized and non-standardized coefficients are presented. Additionally, in accordance with the suggestions of Boissin, Favre-Bonté, and Fine-Falcy (2017) the influence of the noted variables are presented.

Table 4. Values of standardized coefficients, non-standardized coefficients, and influence on intentions

	Non-standardized coefficients	Standardized coefficients	Influence on intentions to start own business	p
Experience of control	0.246	0.109	0.118	.854
Attitudes	-0.147	- 0.373	-0.329	.000
Market assessment	-0.185	0.146	-0.095	.772
Information	-0.185	- 0.098	0.110	.702

The developed model is depicted on Figure 2. The values beside the arrows present coefficients of the influences of variables on *intention to start own business*.

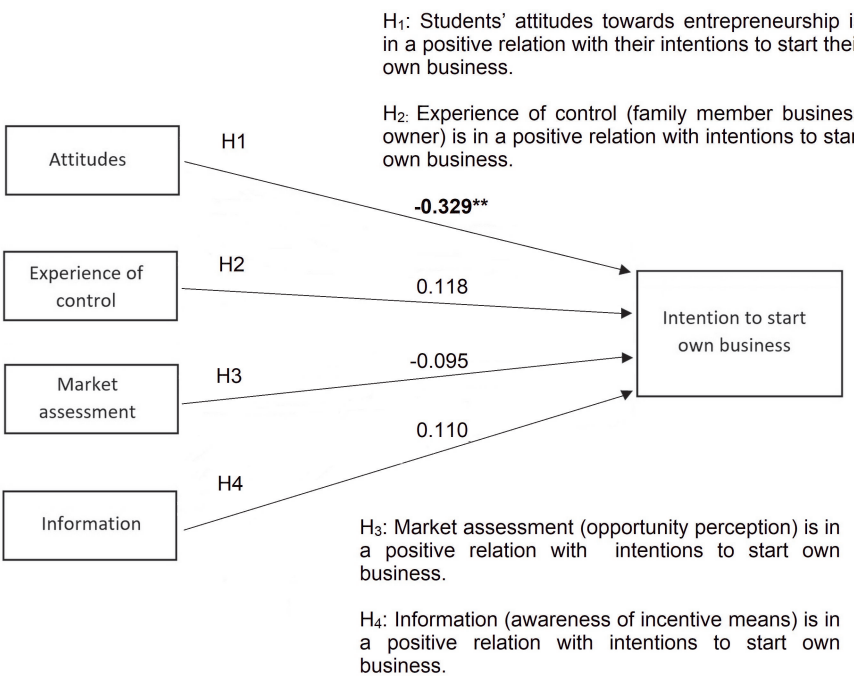

Figure 2. Model of attitude, experience, market assessment and information influence on intention to start own business (with coefficients)

The data was modelled with structural equations where the model's significance was evaluated through several indicators such as Comparative Fit Index – CFI; Tucker-Lewis Index – TLI; Standardized Root Mean Square Residual-SRMR;

and Root Mean Square Error of Approximation- RMSEA. The results of the model's suitability measurement are given in Table 5.

Table 5. Measurement of suitability

	$\chi 2$	df	p	CFI	TLI	RMSEA	WRMR
Model 1	2442.923	28	.00	.922	.817	.0053	2.025

The CFI value of 0.922 indicates a good fit of the model. Similarly, the TLI value of 0.817, the RMSEA value of 0.0053 and the WRMR value of 2.025 indicate a good fit of the model. The results from the binary regression analysis are contradictory with the results of the model that was modelled with structural equations. The structural equation model (SEM) can indicate relational influence between variables that would not be detectable through standard binary logistic regression (Kupek 2006). Therefore, if observing only the SEM results, it is evident that attitudes are negatively influencing intentions to start own business.

5. Discussion

5.1. Findings

Interestingly, almost 80 % of respondents would intend to start their own business. This percentage is traditionally much lower. For this current study, the respondents were students enrolled in business and management courses. This would explain the unusually high percentage rate. It can be argued, that if the respondents are not business and management oriented studies, this percentage of intentions would be significantly lower.

The main research question: *How attitudes, experience of control, market assessment, and information affect youth entrepreneurial intentions?* guided the whole research process.

The results of the research indicate the students' attitudes have a **negative effect** on their intentions to start own business. In other words, the more positive the attitudes, the less likely will the student start his own business. The data indicates that **only** students' **attitudes** have a significant and direct predictive contribution which is similar to the previous findings (Audet 2000; Boissin et al. 2009; Ozaralli/Rivenburgh 2016). Therefore, the first hypothesis *H_1: Students' attitudes towards entrepreneurship is in a positive relation with their intentions to start their own business.* **did not gain support.**

Further, the results of this study indicate that if a family member owns a business, then it is less likely that the student will start their own business. The existing coefficients in Table 4. are statistically not significant, thus hypothesis *H_2: Experience of control (family member business owner) is in a positive relation with intentions to start own business.* **did not gain support**. This is in

contrast with the research conducted by Staniewski (2016) who argued that an entrepreneur in a family has a positive influence on entrepreneurship.

Based on the results in Table 4., the Market assessment variable has a coefficient of
-0.095, however, the result is not statistically significant, therefore the third hypothesis *H_3: Market assessment (opportunity perception) is in a positive relation with intentions to start own business.* **did not gain support.**

Finally, the results indicate that students who are familiar with incentive means for starting own business are less ready to start their own business. The coefficient in Table 4. is not statistically significant, thus the fourth *H_4: Information (awareness of incentive means) is in a positive relation with intentions to start own business.* **did not gain support.**

Interestingly, only the influence of attitudes on intentions to start own business is statistically significant, while the influence of experience of control, market assessment, and information is not statistically significant. As noted, the influence of attitudes not only that is significant, but it is negative. It can be assumed that the overall economic and political stability that defines the entrepreneurship environment in Serbia is favourable, thus negating or annulling positive attitudes, especially when it comes to intentions to start own business. It is evident that a more entrepreneurship-friendly environment should be nurtured in a systematic way.

5.2. Contribution and implications

This research contributes to the existing body of literature as it provides data on students' intentions for starting their own business. The large sample size additionally signifies the results of the research with its representativeness and it establishes credibility for the obtained results. The theoretical implication of this study includes a strong basis for future research. Fellow scholars can address this extensive research as it provides interesting results in the domain of youth entrepreneurship. Interesting insight was obtained on how attitudes, experience of control, market assessment and information affect entrepreneurial intentions. This unexpected result could be due to specific conditions in a transitional environment, where students have access to entrepreneurship-friendly content that forms positive attitudes, but the negative aspects of a country in transition could "nurture" the mind set that public enterprises are safer and more stable compared to private enterprises, hence the less likelihood of intentions to start own business. In addition, the surprising results could be due to the random sample from two universities and business academy. Previous studies in this domain had a similar approach. Random sampling from specific institutions (schools, faculties, universities). However, the majority of previous studies were

not conducted through a period of ten years. The length and the sheer amount of data could have also affected this surprising outcome.

As previously noted, **research implications** may involve this current study as a basis for fellow scholars when they conduct their own research. Through the questionnaire, the respondents (students) increased the awareness and importance of entrepreneurship. Therefore, the **social implications** of this study is that it **may** increase students' awareness and the awareness of other individuals on how important and significant are entrepreneurial activities. The information and data presented in this study provides a thorough overview on how students' attitudes affect their intentions. When it comes to **practical implications**, this study indicates that the in order to enhance youth entrepreneurship activities it is necessary to address issues and challenges on a systematic level. This includes the government and the education system. These two entities have the means to develop and increase youth entrepreneurial activity.

5.3. Limitations and directions for future research

Through the conducted research, interesting findings were obtained. However, the paper is not without limitations and weaknesses. The main weaknesses of this paper is the lack of questions, which include ordinal values such as Likert scales. However, a binary value system was used instead, and these provided adequate results, are in accordance with existing data analysis methods, and does not affect the obtained results (details are given in the Methodology and data analysis section). There is also the lack of other potentially influential variable analysis, such as creativity, innovation capacity, as well as a brief personality survey regarding introvert or extrovert personality traits.

Thus, for future research it is suggested to also include a structured Likert-scale survey, which will address behaviour and personality traits as well the creativity component. It is recommended to expand the research on other factors, which may affect youth entrepreneurial intentions. For another study a thorough comparative study could be conducted which includes entrepreneurial environments from different countries and cultural backgrounds. Finally, an extensive meta-analysis on youth entrepreneurship could be conducted in order to integrate crucial findings in this domain.

6. Conclusion

Youth entrepreneurship can positively affect the economy. This has been analysed in the existing body of literature. Why is this important? Not only the economy prospers with higher rates of entrepreneurs among the young, but also decreases unemployment rates, increases the circulation of value on the market, increases competitiveness and overall increases the standard of living. Now, in

this paper students' intentions on starting their own business was analysed. It can be concluded that students' attitudes affect intentions, but not in an anticipated way. The results indicate that positive attitudes have a **negative effect** on intentions. Therefore, it can be concluded that the complexity of attitudes and other surrounding factors can differently affect entrepreneurial intentions. Transitional economy bias, cultural bias or political climate could affect the relation between students' attitudes and their entrepreneurial intentions. These factors may contributed to the negative impact of attitudes on intentions.

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APPENDIX A

Table A. Results of the binary logistic regression (intention, attitude and experience)

Predictor	β	p	95 % CI	
Age	1.04	.001	1.01	1.06
Private business is more successful from other types of business	1.38	.000	1.29	1.46
People in Serbia don't know the real business opportunities of private enterprises	1.20	.000	1.12	1.27
Private business is uncertain and non-profitable	.69	.000	.64	.72
Working conditions in private enterprises are better compared to other types of businesses	1.10	.000	1.04	1.15
Does someone in your family have a private business?	.83	.009	.72	.95

APPENDIX B

Table B. Results of the binary logistic regression (intention, awareness of incentives and entrepreneurial environment)

Predictor	β	p	95 % CI	
Do you think that start-up loans from business banks are affordable for young entrepreneurs?	.81	.003	.70	.93
Are you familiar with the existence of incentive means for starting own business?	.39	.000	.34	.44
Is there an adequate environment in Serbia which stimulates the young to start their own business	.84	.072	.69	1.01
Should the government have a key role in stimulating the young to start their own business?	.86	.168	.70	1.06