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The Theory of Planned Behaviour and the Factors Affecting Entrepreneurial Intention: A Study on Architecture Faculty Students in Turkey

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Abstract

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Keywords

Entreprenaurship, TPB, Intention

Understanding the factors affecting entrepreneurial intention is one of the most important research topics for academics and policy makers. Researchers have tried to explain entrepreneurial intention with different models and The Theory of Planned Behavior (TPB) is the best-known model to explain entrepreneurial intention in entrepreneurship research. In order to find out the factors affecting entrepreneurial intention, different studies have been carried out on different variables. The aim of the research is to reveal the factors affecting the entrepreneurial intentions of individuals from different perspectives and to determine the relationship between them. For this purpose, the demographic characteristics of individuals and TPB were chosen. The addition of the city of origin and the city of return as new variables makes the study different in terms of literature. Questionnaire method was preferred as the data collection tool in the research, a questionnaire was applied to 81 senior architecture undergraduate students in Turkey and Logistic regression was used as the analysis method. In this direction, it has been examined through three different models in order to observe the effects of both elements separately and together. As a result of the analysis, it was found that individual and situational factors had a higher rate of explaining entrepreneurial intentions. The small sample size seems to be a limitation of the study. Future studies on a large sample group using different variables and statistical methods will make significant contributions to the entrepreneurship ecosystem.

1. INTRODUCTION

Entrepreneurship as a scholarly field seeks to understand how opportunities to bring into existence "future" good and services are discovered, created, and exploited, by whom, and with what consequences. At its core the field is concerned with why, when and how opportunities for the creation of goods and services in the future arise in an economy; and why, when, and how some are able to discover and exploit these opportunities while others can not or do not (Venkataraman, 1997). "Entrepreneurship is a way of thinking that emphasizes opportunities over threats. The opportunity identification process is clearly an intentional process" (Krueger, Reilly, Carsrud, 2000: 411). Many factors such as social environment, economic environment, political order, personal history and personality, especially entrepreneurial intention, have an impressive role in the emergence of entrepreneurial activities (Bird, 1988; Arenius and Minniti 2005; Ajzen 2005; Krueger et al. 2000).

Empirically, behavior is often only weakly predicted by attitudes alone or by exogenous factors that are either situational (for example, employment status or informational cues) or individual (for example, demographic characteristics or personality traits). That is, as a result, predicting entrepreneurial activities by modeling only exogenous factors often results in disappointingly small explanatory power (Krueger, et al: 2000, 414). Exogenous influences usually affect intentions and behavior only indirectly, through

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attitude changes (Ajzen 1991). Intentions models will predict behavior better either individual (for example, personality) or situational (for example, employment status) variables (Krueger, et al: 2000, 411). Intentions have proven the best predictor of planned behavior in the psychology literature and entrepreneurship is exactly the type of planned behavior (Bird 1988, Katz and Gartner 1988) for which intention models are ideally suited. Researchers have tried to explain entrepreneurial intention with comprehensive cognitive models such as Shapero and Sokol's Entrepreneurial Event model (1982), Bird's Entrepreneurial Intention model (1988), and Ajzen's (1991) The Theory of Planned Behavior (TPB). TPB is the most used model to explain entrepreneurial intention in entrepreneurship research. In the vast majority of studies, TPB variables were found to have strong effects on explaining entrepreneurial intent (Dinç, Akçakanat, 2018: 763). According to the TPB, Attiude, Subjective norm and Perceived behavioral control are 3 factors that determine entrepreneurial intention (Figure 1).



Figure 1: TPB Model, Source: Ajzen, 1991:182

Subjective norm is a social factor that refers to the perceived social pressure to perform or not to perform the behavior (Ajzen, 1991: 188). Perceived behavioral control (Self Efficacy) helps to account for such diverse phenomena as changes in coping behavior produced by different modes of influence, level of physiological stress reactions, self-regulation of refractory behavior, resignation and despondency to failure experiences. Judgments of self-efficacy also determine how much effort people will expend and how long they will persist in the face of obstacles or aversive experiences (Bandura, 1982, s. 122). According to the theory of planned behavior, perceived behavioral control, together with behavioral intention, can be used directly to predict behavioral achievement. (Ajzen, 1991: 184) Attitude towards a behavior like entrepreneurship is a person's judgment about whether the behavior will be good or bad, and it is also an indicator of whether or not to perform it (Ajzen & Fishbein, 1980: 56). Attitude is strongly linked to the intention of starting a new business (Lüthje & Franke, 2003, p. 135). Attitudes are believed to act as mediators for influences of personal background factors. Apart from this "main chain" of causal

influences, the individual's current situation (i.e., employment status) is expected to have an impact on both conviction and intentions (Davidsson, 1995, s. 712). In order to find out the factors affecting entrepreneurial intention, different studies have been carried out on different variables. (Linan et al;2011; Turker, Selcuk: 2009). In this study, we also added such as the city of origin and the city to return to as some different variables, and as far as our research, we could not see these variables in the literature. In this study after giving place to important literature studies on the factors affecting entrepreneurial intention, we analyzed the factors affecting entrepreneurial intentions of university students. The small sample size seems to be a limitation of the study but the addition of the city of origin and the city of return as new variables makes the study different in terms of literature. Future studies, using different variables and statistical methods and expanding the sample group, will have significant contributions to practitioners and the literature.

2. TPB AND THE FACTORS AFFECTING ENTREPRENEURIAL INTENTION

There are many studies in the literature that try to explain entrepreneurship intentions through planned behavioral theory (Ajzen, 1991; Krueger vd., 2000; Linan & Chen, 2009; Engle et al., 2010; Linan et al. 2011; Nishimura ve Tristan 2011; Koe et al., 2012; Astuti ve Martdianty, 2012; Iqbal et al., 2012; Obschonka et al 2015, Law and Breznik 2017, Ilerisov et al. 2021). Gird and Bagraim's (2008:711), study TPB was tested as a predictor of entrepreneurial intent amongst final-year commerce students at two universities and its found that TPB significantly explains 27% of the variance in students' entrepreneurial intentions. As predicted by TPB, perceived behavioural control, subjective norms, and attitudes towards entrepreneurship all displayed statistically significant positive correlations with entrepreneurial intent (Gird & Bagraim, 2008, s. 717). Kolvereid (1996) examined the employment intentions of 128 undergraduate business students in Norway and found that TPB significantly influenced self-employment intentions. The attitudes towards entrepreneurship variable displayed the strongest effect on entrepreneurial intent, while the perceived behavioural control variable and the subjective norms variable both displayed weaker statistically significant effects. Self-employment experience displayed a highly significant effect on entrepreneurial intent. Self-employed parent and self-employed close relative were not significant in the regression model (Gird & Bagraim, 2008, s. 718). Tkachev and Kolvereid (1999:278) examined TPB as predictors of entrepreneurial career intentions amongst Russian university students. The results have shown that attitude, subjective norm and perceived behavioural control determine entreprenaural intentions among Russian students. According to the Linan et al's(2011:195) study personal attitude and perceived behavioural control are the most relevant factors explaining entrepreneurial intentions. (Liñán, et al, 2011: 195)

Innovativeness is one of the factors affecting entrepreneurial intention (Law and Breznik 2017: 686; Ilerisoy et al, 2021), also it is the most critical feature of entrepreneurial behavior (Schumpeter 1934). Innovation may be activated-factor that interfere with key aspects of cognition, perception, motivation, and self regulation (Baron, Hmieleski, & Henry, 2012, s. 319).

Situational (for example, employment status or informational cues) or individual (for example, demographic characteristics or personality traits) variables are predictors for entreprenaurship intent. (Kruegeret et al, 2000:413). It has been the subject of different researches whether being an entrepreneur in people's close environment will increase their entrepreneurial intentions. The findings of some researchers show that having entrepreneurial role models around people has positive effects on their entrepreneurial intentions. (Scherer *et al*; 1989; Krueger 1993; Scherer at al 1991). According to the Linan et al. (2011:195), research finding, having an entrepreneur in the family also has a positive effect on entrepreneurial intention. According to the results of Krueger et al.'s study, Role models will affect entrepreneurial intentions only if they change attitudes and beliefs such as perceived self-efficacy. (Krueger, et al., 2000: 412). According to the researches of Dohse and Walter (2011: 877), for German

students at the individual level found that role models facilitating the transfer of tacit knowledge and the expectation that strong ties will provide know-how and know-who positively impact entrepreneurial intentions (Dohse & Walter, 2012: 877).

Another way to obtain vicarious experience of entrepreneurship is to work in a small, owner-managed firm. A gross overrepresentation of individuals' with small firm work experience has been reported in studies of manufacturing firm founders (Davidsson, 1995). Prior entrepreneurship experiences can come from many sources such as entrepreneurship training programs, family business, part-time jobs, summer internship or even the attempts to start a small business project before (Khuong & An, 2016: 109). According to the results of the study conducted on 318 students in Malaysia. Students with some work experience have higher entrepreneurial Intention than students with no work experience. Male students have higher Entrepreneurial Intention than female students. There is insufficient evident to show that there is difference in Entrepreneurial Intention by Parent's Occupation. General attitude has a significant influence on entreprenaural intentions (Rasli, Malekifar, & Jabeen, 2013: 185). Collecting data from 401 students aged from 18 to 24 years old in Vietnam National University. Prior entrepreneurial experience, external environment and perceived feasibility were the three independent variables that significantly affected the positive perception toward entrepreneurship. They could not find any evidence to prove the correlation relationship between social norm and Entr. Intention (Khuong & An, 2016:104). A sample of 337 men and women were grouped according to their perception of their parent entrepreneur's performance or the absence of such a role model. Result show that Personality and entrepreneurial career preference were complementary for individuals with a parent perceived to be a high performer. (Scherer, Brodzinski, & Wiebe, 1991: 195).

Gender differences are also among the factors that can affect entrepreneurial intention. There are genderspecific pathways on entreprenaurship intention (Schoon & Duckworth, 2012: 1719; Bruni, Gherardi, & Poggio, 2004). According to the results of Henry at al' (2016: 235) literarature research with 18 journals over a 30-year period studies of gender and entreprenaurship, this field lag behind those in other disciplines (i.e. sociology, political/organisational science). In the 1990s, the number of entrepreneurs of men and their tendency to entrepreneurship is higher than that of women (Reynolds, 1995: Scherer, Brodzinsky, & Wiebe, 1990, 37). Today, this difference seems to have diminished. Among 63 economies featured in and the previous one issued 2015 GEM report, overall female total Entrepreneurial activity rates have increased by 10% and the gender gap (ratio of women to men participating in entrepreneurship) has narrowed by 5%. (GEM, 2017) For men, becoming an entrepreneur was predicted by having a self-employed father; for women, it was predicted by their parents' socioeconomic resources (Schoon & Duckworth, 2012, 1719). Tkachev and Kolvereid (1999) results have shown that amongst Russian university students as family background and gender is not significantly correlated with intentions, self-employment experience was positively correlated with it (Tkachev & Kolvereid, 1999, s. 277). Scherer et al (1990) refer to studies, which have established that women have lower perceptions of self-efficacy for careers in which they are underrepresented. (Scherer, Brodzinsky, & Wiebe, 1990, s. 37).

Fatoki (2014, 294), investigate empirically whether there is a significant difference in the entrepreneurial intention of students who have previous work experience compared with students without previous work experience. It was found that students with previous work experience have a higher level of entrepreneurial intention compared to students without previous work experience. According to the result of 375 final year students in Malaysian universities, a positive significant effect on the relationship between innovativeness, risk-taking propensity, family background, and a supportive environment (Shamsudin, et al, 2017:423).

The investigation of the entrepreneurial intentions of the students studying at the technical faculty has also been the subject of different studies (Lüthje and Franke 2003: 143; Law and Breznik 2017; Ilerisoy et al 2021). According to the results of the research conducted by Lüthje and Franke (2003: 143) at the

engineering faculty; shows that the attitude towards entrepreneurship explains the entrepreneurial intentions of students who receive technical education very strongly. Law and Breznik (2017) show that learning motivation, innovation, entrepreneurship behavior and self-efficacy are factors affecting entrepreneurship intentions of engineering faculty students. Ilerisoy et al. investigated the effects of architectural education on entrepreneurial intention among students from six architecture faculties in Turkey. The results show that that learning motivation, attitude and self-efficacy through design courses have an effect on entrepreneurship. However, innovation does not have an effect on entrepreneurial intention for architecture students.

3. RESEARCH METHODOLOGY

3.1 Questionnaire Design

The aim of the research is to reveal the factors affecting the entrepreneurial intentions of individuals from different perspectives and to determine the relationship between them. Since the desire of individuals to open their own businesses is an indicator of their entrepreneurial intention, it has been tried to determine what the factors explaining this intention are. For this purpose, the demographic characteristics of individuals and the theory of planned behavior were chosen as two factors that could be effective on entrepreneurial intention. In this direction, it has been examined through three different models in order to observe the effects of both elements separately and together. Questionnaire method is used as a data collection tool in the research. Final year architecture undergraduate students in Turkey are included in the study. The reason why only senior students are included in the study is based on the assumption that students in the last year of their education can have a clearer idea about their future planning. Accordingly, the participant students are informed about the research and a questionnaire is administered to 81 students and Logistic regression was used as the analysis method in the study. This method is basically used to classify a categorical variable and reveals the effects of independent variables on the dependent variable. For the purpose of the study, the survey method was used as a data collection tool.

The questionnaire consists of two parts and aims to learn the entrepreneurial intentions of the students. In the first part, there are questions about demographic information. In addition, students are asked whether they would like to "*become their own boss after graduation*". In the second part of the questionnaire, questions are asked to measure the contribution of students to entrepreneurial intention. In this study, the "Entrepreneurship Intention Scale" developed by Law and Breznik (2017) is used. The scale consists of (Attitude towards Entrepreneurship, Self-Efficacy, Motivation for Learning, Innovativeness) factor and 22 statements representing the sub-dimensions of Planned Behavior Theory. The scale is given by Table 1.

	Label	Initial Items
	A1	The lessons I attended increased my preference to be the boss of my own job rather than
itude		the employee.
	Δ2	The lessons I attended made me think if I worked in my own business, I would make a lot
	112	of money.
	Δ3	The lessons I attended improved my idea of starting a new business rather than being an
Att	110	executive in an existing company.
	E1	The lessons I attended made me think it would be easy to start a new business.
	F2	The lessons I attended made me think that if I set up my own business, I would have full
		control over my business.
	E3	The lessons I attended increased my belief that if I started my own business, my chances
	20	of success would be very high.
	E4	The lessons I attended allowed me to be ready for a lot of work if I started my own
~		business.
cacy	E5	The lessons I attended made me have enough information to start a business.
Iffic	E6	The lessons I attended increased my belief in developing an entrepreneurial project.
If-E	E7	The lessons I attended made me think that establishing my own company was the right
Se		way to take full advantage of the training I received.
	INO1	The lessons I attended made me always look for ways to look at topics from different
	D.C.A	perspectives.
	INO2	The lessons I attended made me like to try various ways to do the same.
	INO3	The lessons I attended made me start to surprise people with my new ideas in this field.
SS	INO4	The lessons I attended increased my hope of developing new techniques in my field of
vne		
ativ	INUS	The lessons I attended made people often ask me for help with creative events.
nov	INO6	The lessons I attended often brought original ideas to my mind.
In	INO/	The lessons I attended made me prefer works that require original thinking.
	LMI	The lessons I attended increased my desire to learn important topics.
	LM2	The lessons I attended increased my belief that I would be successful while learning
uo	1.1/2	something new
uing ⁄ati	LM3	People think that I look enjoyable while studying the classes I attend.
etiv	LM4	I enjoy attending classes on topics of interest.
N L	LMD	I wouldn't nesitate to make an effort to work if the reward is high.

Table 1. List of Items in The Survey

Students are asked to evaluate the statements about their entrepreneurial intentions using a 5-point Likert Scale (1=Strongly agree, 5=Strongly disagree).

3.2 Research Models and Models Testing Method

The basic models tested in this study are as follows.

Model 1; Individual and Situational Aspects

In this part of the study, it is investigated whether individual and situational factors have an effect on entrepreneurial intention. In this direction, demographic characteristics of the participants are taken into account, and characteristics that define them individually and situationally, such as age, gender, place of residence, income levels and income expectations, and father's occupations, are included in the model as explanatory variables

Model 2: Elements of Planned Behavior Theory

The effects of the elements of the Planned Behavior Theory on the entrepreneurial intentions of individuals are investigated by Model 2. So, factors expressing the dimensions of Planned Behavior Theory were used as explanatory variables.

Model 3: Concatenated Case

At this stage of the study, individual and situational elements and elements of planned behavior theory are combined in a single model. The aim here is to consider as a whole the factors that can affect the answer given to the question of whether the person wants to be his own boss, which is the response variable.

Regression analysis is one of the most used methods to examine the relationships between variables. The statistical relationship between two variables is the prediction of the Y value with a certain margin of error versus a known value of the independent variable. We can express the statistical relationship with the $Y = f(x; \beta) + \varepsilon$ equation, β being the parameter and ε the error term. In general, the known dependent variable is a measurable and continuous variable. However, the dependent variable may not always be measurable. Logistic regression analysis is used in cases where the response (dependent) variable is on a nominal or ordinal scale.

In the logistic regression analysis, the response variable Y is a Bernoulli variable with probability of PP. The regression model of the binary response $(Y_i = 0,1)$ variable is given below, when the independent variables are denoted by $X = (X_1, X_2, ..., X_p)$

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i \tag{1}$$

According to the regression assumptions, since the expected value of the error term is $E\{\varepsilon_i\}=0$, the conditional expected value of the random variable Y_i can be written as $E\{Y_i / X\} = \beta_0 + \beta_i X_i$. In this way, the expected value of the Y_i variable, which has a Bernoulli distribution, that is, the probability of success of the random variable is modeled.

Since the dependent variable Y is a categorical variable that takes the value of 0-1 in the logistic regression model, the normality assumption valid in the regression analysis break, so the parameter estimation cannot be obtained by the least squares method. Logistic regression analysis assumes that the response variable is a stochastic event. For this reason, while the value of the dependent variable is predicted in regression analysis, the probability of realization of one of the values that the dependent variable will take in logistic regression analysis is predicted. According to this resul the response variable takes the value 0 or 1. This probability value is obtained using the following model.

$$\pi(x) = E(Y = 1/x) = \frac{e^{\beta_0 + \beta_1 x}}{1 + e^{\beta_0 + \beta_1 x}}$$
(2)

A logit transformation is applied to Eq. 2 and Eq. 3 is obtained.

$$\ln\left[\frac{\pi(x)}{1-\pi(x)}\right] = \ln\left[\frac{E(Y=1/x)}{E(Y=0/x)}\right] = \ln\left(e^{\beta_0+\beta_1x}\right) = \beta_0 + \beta_1x \quad (3)$$

In the logistic regression model, the parameter is estimated using the "maximum likelihood" method. This method is used to estimate the parameter value that maximizes the likelihood function. The likelihood function is a function of the parameter and gives the probability of the observed data. The maximum likelihood estimators of the parameters in this function are obtained in such a way as to maximize the function. The estimates will be very close to the observed data. (4-7)

Comparison of performances

In the study, binary classification confusion matrix was used for model performance evaluation measurement. Accuracy, sensitivity, specificity and precision measures can be calculated from the confusion matrix. Model performances can be compared with these criteria.

 Table 2. Confusion Matrix

		Real		
		Modal		
		1	0	
Prediction	1	TP	FP	
Model	0	FN	TN	

TP: True Positive, TN: True Negative, FN: False Negative, FP: False Positive

3.3 Validity and Reliability

The reliability of the "Entrepreneurial Intention Scale" was evaluated using the Cronbacha Alpha criterion. For the scale to be reliable, this criterion value must be greater than 0.6. Reliability analysis results of the scale used are given in Table 3.

Table 3. Reliability Indexes	
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Variables	Items	Cronbach's
		Alpha
Attitude	3	0.64
Self-Efficacy	7	0.83
Innovativeness	7	0.91
LearningMotivation	5	0.79

Logistic regression analysis is a regression analysis in which the response variable is a categorical variable. Although it has different assumptions from regression analysis, inferences similar to regression analysis are made. First of all, the validity of the created model should be tested.

Table 4. Omnibus Tests of Model Coefficients

	Chi-	р-
	Square	value
Model	31,84	0.02
1 Model	13,82	0.08
2 Model	45.76	0.00
3		

Since the calculated p-value that based on Chi-Square statistics for all three models is less than 0.05, the models are generally valid and significant.

3.4 Research Findings

A questionnaire is applied to 81 participants within the scope of the research, and approximately 55% of the participants are female and 45% male (Table 5). Since the survey is administered to university students, all of the participants are observed to be 24 years old or younger. It is seen that 69% of the students come from metropolitan cities and 6% from villages or towns. When the occupations of the parents of the respondents are examined, it is seen that the majority of them are civil servants (34.6%) and business owners (34.6%), while the third is paid workers (17.3%).

		Freq.	%
Condon	Women	45	55.6
Gender	Male	36	44.4
	>20	4	4.93
Age	21-23	55	67.90
	24 >	22	27.16
	Village	4	4.9
Place of accommodation before	Town	1	1.2
the university	Municipality	20	24.7
	City	56	69.1
	Public	28	34.6
Eather profession	Company employee	14	17.3
Father profession	Own business	28	34.6
	Others	11	13.6
	Min Wage (Under	9	11
	365)		
Household income (US \$)	366-657	36	44.4
Household Income (0.5 \$)	657-950	22	27.2
	951-1240	6	7.4
	1241 and Above	6	7.4
Have you sold anything up to	Yes	40	49.4
now?	No	40	49.4
Does anyone in your close	Yes	58	71.6
friends or family own their own	No	22	27.2
business?	110		
	Min Wage (Under	10	12.3
What is your expectation about	365)		
your average income within	366-657	45	55.6
two years after graduation?	657-950	16	19.8
(US \$)	951-1240	6	7.4
	1241 and Above	3	3.7

Table 5. Demographic Details of Respondents

Logistic regression analysis is performed for three different models: "Individual and situational elements in the study", "Elements of planned behavior theory" and "Combined". By using the confusion matrix in the comparison of the models, the correct classification performances of the models are obtained. The explanation ratio of the explanatory variables used in the models on the response variable is determined by the Nagelkerke R Square criterion. This ratio represents the percentage of the response variable that can be explanatory variables.

	Accuracy	R
		square
Model	76.6	0.45
1		
Model	66.7	0.21
2		
Model	80.5	0.60
3		

Table 6. Comparison of Models Performances

In the model 3 (combined model), the correct classification performance calculated based on the logistic probabilities estimated after the analysis is obtained as 80.5. This is the highest value obtained. The model 1 in which individual and situational elements are examined has a higher correct classification performance than the model 2 in which elements of the theory of planned behavior. In addition, when the explanation rate of the explanatory variables on the response variable is taken into account, it is seen that the Model 3 (combined model) has a higher explanation percentage than other models with 0.60.

	Değişkenler	В	Sig
	Place of accommodation before the university (1)	4.42	0.02
Model 1	Have you sold anything up to now?	-1.36	0.06
	Does anyone in your close friends or family own their	1.29	0.08
	own business?		
Madal 2	Self Efficiency	-	0.02
Model 2		1.152	
	Place of accommodation before the university (1)	5.05	0.02
	Does anyone in your close friends or family own their own business?	1.61	0.81
	Father profession	-1.92	0.09
Model 3	Attitude(A)	-1.02	0.05
	Self-Efficacy(E)	-1.23	0.06
	Innovativeness(INO)	1.14	0.09

Table 7. Explanatory Variables on the Model

In logistic regression, interpretation of analysis results and making inferences depend on the category chosen as a reference at the beginning of the analysis. In this study, the reference category of the response variable for the question "Do you want to own your own business?" is the answer "Yes". For this reason, the comments made express the orientation from "Yes" to "No".

For Model 1, in which the effects of Individual and Situational factors on entrepreneurial intention are examined, the variables that are considered statistically significant according to the results of the logistic regression analysis are given in Table 7 (sig.<0.10). According to these results, when the pre-university residence status is added to the model, the established model changes significantly. It is seen that the

orientation in this change (B=4.42) is positive. In other words, the living situation of the participants in the town negatively affects their intention to open their own business, and at this stage, the answer given to the response variable changes positively as "No". Another significant variable in this model is the answer given to the question of whether he has sold before. Here, the orientation in change is negative (B=-1.36). The addition of participants who have made sales to the established model significantly affects the model and this effect is seen to be in the opposite direction. In this case, since the answer given to the response variable turns from the expression "No" to the expression "Yes", it is seen that this variable has a positive effect on the entrepreneurial intention. Finally, the orientation of the change in owning a workplace in the immediate environment is positive (B=1.29). This means that the state of being a business owner of someone close to him negatively affects his entrepreneurial intention.

For Model 2, in which the effect of Planned Behavior Theory Elements on entrepreneurial intention is examined, the variables considered statistically significant according to the results of the logistic regression analysis are given in Table 7 (sig.<0.10). Here, adding the Self Efficiency dimension to the model has a significant effect and this effect is negative (B=-1.15). This means that as the level of Self-efficiency increases, the orientation from "Yes" to "No" decreases. In other words, the increase in the self-efficiency level has a positive effect on the entrepreneurial intention.

The variables considered statistically significant in the combined Model 3 are given in Table 7. Here, it is seen that there was a significant change with the addition of the variables of place of residence (town), owning a business in the immediate vicinity (yes) and Innovativeness before coming to the University, and this change was positive (B=5.05, B=1.61 and B=1.14, respectively). In this case, in the case of living in the town and having a workplace nearby, the answer given by the participants to the answer variable changes to No, that is, it is seen that it has a negative effect on the entrepreneurial intention. Similarly, as the innovativeness level of individuals increases, the answer given to the response variable changes from "yes" to "no". The variables that have a positive effect on the entrepreneurial intention are the father's occupation (owning his own workplace), the variables expressing the attiute and self-efficiency dimensions of the theory of planned behavior. While the addition of these variables to the model creates a statistically significant effect, this effect is inversely proportional to the orientation from "Yes" to "

4. CONCLUSION

Understanding the factors affecting entrepreneurial intention in entrepreneurship, which stands out with its socio-economic importance, is one of the most important research topics for academics and policy makers. In the study, the entrepreneurial intentions of the students are examined through the answers that they gave to the question of their desire to open their own businesses in the future. It has been tried to determine whether the individual and situational elements of individuals and the elements of the theory of planned behavior have an effect on their entrepreneurial intentions, and if so, in what way. In this direction, individual and situational elements of Planned Behavior Theory have been taken into account as separate models and a combined model has been added to the study. As a result of the analyzes made, it is seen that the model established for individual and situational elements have a higher explanation rate and a higher percentage of correct classification than the model established with the elements of the theory of planned behavior. In addition, it is determined that both the disclosure rates and the correct classification percentages increased with the combined model. As a result, considering both elements together give better results in terms of determining entrepreneurial intention and revealing the relationship between these variables.

REFERENCES

- [1] Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211..
- [2] Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice Hall
- [3] Ajzen, I. (2005). Laws of human behavior: Symmetry, compatibility, and attitude-behavior correspondence. Multivariate research strategies, 3-19.
- [4] URL Akçakanat, T., & Dinç, M. (2018). The Effect Of Machiavellian Personality On The Entrepreneurial Intention In The Context Of Planned Behavior, International Journal of Economic & Administrative Studies.
- [5] Arenius, P., Minniti, M. Perceptual Variables and Nascent Entrepreneurship. Small Bus Econ 24, 233–247 (2005). https://doi.org/10.1007/s11187-005-1984-x
- [6] Astuti, R. D., & Martdianty, F. (2012). Students' entrepreneurial intentions by using theory of planned behavior: The case in Indonesia. The South East Asian Journal of Management.
- [7] Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist,(37), s. 122-147.
- [8] Baron, R. A., Hmieleski, K. M., & Henry, R. A. (2012). Entrepreneurs' dispositional positive affect: The potential benefits and potential costs of being "up". Journal of Business Venturing, 27(3), s. 310-324
- [9] Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intentions. Academy of Management Review, 13(3), 442-454
- [10] Bruni, A., Gherardi, S., & Poggio, B. (2004). Gender and entrepreneurship: An ethnographic approach. Routledge.
- [11] Davidsson, P. (1995). Determinants Of Entrepreneurial Intentions. RENT DC Workshop in Entrepreneurship Research, Piacenza, Italy,.
- [12] Dohse, D., & Walter, &. S. (2012). Knowledge context and entrepreneurial intentions among students. mall Business Economics, 39(4), s. 877-895.
- [13] Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., ... & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. International Journal of Entrepreneurial Behavior & Research.
- [14] Fatoki, O. (2014). The Entrepreneurial Intention of Undergraduate Students in South Africa: The Influences of Entrepreneurship Education and Previous Work Experience. Mediterranean Journal of Social Sciences, 5(7), s. 294-299.
- [15] GEM. (2017). Gem 2016/2017 Women's Entrepreneurship Report. https://www.gemconsortium.org/ report/gem-20162017-womens-entrepreneurship-report Last Accessed: 01.10.2022
- [16] Gird, A., & Bagraim, J. (2008). The theory of planned behaviour as predictorof entrepreneurial intent amongst final-year university students. South African Journal of Psychology, 38(4), s. 711-724.

- [17] Henry, C., Foss, L., & Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. International Small Business Journal,, 34(3), s. 217-241.
- [18] Iqbal, A., Melhem, Y., & Kokash, H. (2012). Readiness of the university students towards entrepreneurship in Saudi Private University: An exploratory study. European Scientific Journal, 8(15).
- [19] İlerisoy, Z. Y., Aycı, A., Aycı, H., & Kınacı, E. B. (2021). Impacts of architectural education on entrepreneurial intention: a case study of senior architects from six universities in Turkey. Archnet-IJAR: International Journal of Architectural Research, 15(3), 719-737.
- [20] Katz, J., & Gartner, W. B. (1988). Properties of emerging organizations. Academy of management review, 13(3), 429-441.
- [21] Khuong, M. N., & An, N. H. (2016). The factors affecting entrepreneurial intention of the students of Vietnam national university—a mediation analysis of perception toward entrepreneurship. Journal of Economics, Business and Management,, 4(2), s. 104-111.
- [22] Koe, W. L., Sa'ari, J. R., Majid, I. A., & Ismail, K. (2012). Determinants of entrepreneurial intention among millennial generation. Procedia-Social and Behavioral Sciences, 40, 197-208.
- [23] Kolvereid, L. (1996). Prediction of Employment Status Choice Intentions. Entrepreneurship Theory and Practice, s. 47-58.
- [24] Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. Journal of business venturing, 15(5-6), 411-432.
- [25] Law, K. M., & Breznik, K. (2017). Impacts of innovativeness and attitude on entrepreneurial intention: Among engineering and non-engineering students. International Journal of Technology and Design Education, 27(4), 683-700.
- [26] Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. Entrepreneurship theory and practice, 33(3), 593-617.
- [27] Liñán, F., Rodríguez-Cohard, J., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: a role for education. International entrepreneurship and management Journal,, 7(2), s. 195-218.
- [28] Lüthje, C., & Franke, N. (2002, May). Fostering entrepreneurship through university education and training: Lessons from Massachusetts Institute of Technology. In European Academy of Management 2nd Annual Conference on Innovative Research in Management, Stockholm (pp. 9-11).
- [29] Nishimura, J. S., & Tristán, O. M. (2011). Using the theory of planned behavior to predict nascent entrepreneurship. Academia. Revista Latinoamericana de Administración, (46), 55-71.
- [30] Obschonka, M., Silbereisen, R. K., Cantner, U., & Goethner, M. (2015). Entrepreneurial selfidentity: predictors and effects within the theory of planned behavior framework. Journal of Business and Psychology, 30(4), 773-794.
- [31] Rasli A, S. K., Malekifar, S., & Jabeen, S. (2013). Factors affecting entrepreneurial intention among graduate students of Universiti Teknologi Malaysia. International Journal of Business and Social Science, 4(2), s. 182-188.

- [32] Reynolds, D. (1995). "Who Starts New Firms? Linear Additive versus Interaction Based Models. The Babson-Kauffman Entrepreneurship Research Conference. London.
- [33] Shapero, A., & Sokol, L. (1982) The social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Ves- per (Eds.), Encylclopedia of entrepreneurship (pp. 72-90). Englewood Cliffs, NJ: Prentice-Hall.
- [34] Scherer, R., Brodzinski, J., & Wiebe, F. (1991). Examining the relationship between personality and entrepreneurial career preference,. Entrepreneurship & Regional Development,, 3(2), s. 195-206.
- [35] Scherer, R., Brodzinsky, J., & Wiebe, F. (1990). Entrepreneur Career Selection and Gender: A Socialization Approach, Journal of Small Business Management,(28), s. 37-45.
- [36] Schoon, I., & Duckworth, K. (2012). Who Becomes an Entrepreneur? Early Life Experiences as Predictors of Entrepreneurship. Developmental Psychology,, 48(6), s. 1719–1726.
- [37] Shamsudin, S. F., Mamun, A. A., Nawi, N., Nasir, N., & Zakaria, M. (2017). Factors affecting entrepreneurial intention among the Malaysian university students. The Journal of Developing Areas, 51(4), s. 423-431.
- [38] Schumpeter, J. (1934) The Theory of Economic Development, Cambridge, Mass: Harvard University Press
- [39] Tkachev, A., & Kolvereid, L. (1999). Self-employment intentions among Russian students. Entrepreneurship & Regional Development, s. 269-280.
- [40] Turker, D. & Sonmez Selcuk, S. (2009), "Which factors affect entrepreneurial intention of university students?", Journal of European Industrial Training, Vol. 33 No. 2, pp. 142-159.
- [41] Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. K. &. Brockhaus (Dü.) içinde, Advances in entrepreneurship, firm emergence, and growth (Cilt 3, s. 119-138). Greenwich, CT: JAI Press.