MEHMET AKİF ERSOY ÜNİVERSİTESİ
İKTİSADİ VE İDARİ BİLİMLER FAKÜLTESİ DERGİSİ
Mehmet Akif Ersoy University
Journal of Economics and Administrative Sciences Faculty

ISSN: 2149-1658
Cilt: 10 Sayı: 2 s.1457-1478
Volume: 10 Issue: 2 p.1457-1478
Temmuz 2023 July

THE EFFECT OF THE PARTICIPATION OF SUCCESSFUL ENTREPRENEURS ON ENTREPRENEURIAL INTENT IN APPLIED ENTREPRENEURSHIP EDUCATION

UYGULAMALI GİRİŞİMCİLİK EĞİTİMİNDE BAŞARILI GİRİŞİMCİLERİN KATILIMININ GİRİŞİM NİYETİ ÜZERİNDEKİ ETKİSİ

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Makale Türü	Article Type
Araştırma Makalesi	Research Article

Başvuru Tarihi	Application Date
16.12.2022	12.16.2022

Yayına Kabul Tarihi	Admission Date
13.06.2023	06.13.2023

DOI
https://doi.org/10.30798/makuiibf.1220355

[*] SDÜ Bilimsel Araştırma Projeleri Koordinasyon Birimi tarafından 26857.14 ABD Doları destek sağlanmıştır.

Abstract

An applied entrepreneurship program was designed as theoretical, game-based and mentor supported for 13-week was implemented twice; to assess its effects on students' perceived behavioral control, entrepreneurial intention, knowledge and skills. The matching pretest-posttest data were used in the analyses. The program was not found to lead to an increase in entrepreneurial intention. However, they were found to bear a strong potential for more sustainable development of these aspects. The program was implemented as a first in terms of its contribution to the local entrepreneurial ecosystem. The aim of the program was to question its own structure; that is, to find out if the participation of entrepreneurs – a costly feature of the program – really does make a difference in fostering entrepreneurial intentions in the participants. Another unique aspect of the study is that the program brought together actors from academic, business and non-profit fields to collaborate.

Keywords: Entrepreneurship Education, Theory of Planned Behaviour, Entrepreneurial Intention, Entrepreneurial Knowledge and Skills.

Öz

Teorik, oyun temelli ve mentor destekli olarak tasarlanan uygulamalı girişimcilik programı öğrencilerin algılanan davranış kontrolü, girişimcilik niyeti ve girişimcilik bilgi ve becerileri üzerindeki etkilerini değerlendirmek üzere 13'er haftadan iki dönem uygulanmıştır. Analizlerde eşleşen ön test-son test verileri kullanılmıştır. Programın girişimcilik niyetinde bir artışa yol açmadığı tespit edilmiştir. Ancak, bu yönlerin daha sürdürülebilir gelişimi için güçlü bir potansiyel taşıdıkları bulunmuştur. Program, yerel girişimcilik ekosistemine sağladığı katkı açısından bir ilk olarak hayata geçirilmiştir. Programın amacı; programın maliyetli bir özelliği olan girişimcilerin katılımının, katılımcılarda girişimcilik niyetlerini geliştirmede gerçekten bir fark yaratıp yaratmadığını öğrenmek olarak kendi yapısını sorgulamaktır. Çalışmanın bir başka benzersiz yönü de programın akademik, ticari ve kar amacı gütmeyen alanlardan aktörleri işbirliği yapmak üzere bir araya getirmesidir.

Anahtar Kelimeler: Girişimcilik Eğitimi, Planlanmış Davranış Teorisi, Girişimcilik Niyeti, Girişimcilik Bilgi ve Becerileri.

GENİŞLETİLMİŞ ÖZET

Çalışmanın Amacı

Girişimcilik ekosisteminin büyümesine katkıda bulunmanın yaygın olarak benimsenen bir yolu, başarılı girişimcilerin yer aldığı etkinlikler düzenlemektir. Bu etkinlikler gerçekten öğrencileri girişimciliğe teşvik ediyor mu? Bu çalışmada, bu olayların gerçekte amaçlanan amaca ne ölçüde hizmet ettiği araştırılmıştır. Dolayısıyla programın amacı; programın maliyetli bir özelliği olan girişimcilerin katılımının, katılımcılarda girişimcilik niyetlerini geliştirmede gerçekten bir fark yaratıp yaratmadığını öğrenmek olarak kendi yapısını sorgulamaktır. Çalışmanın bir başka benzersiz yönü de programın akademik, ticari ve kâr amacı gütmeyen alanlardan aktörleri iş birliği yapmak üzere bir araya getirmesidir.

Araştırma Soruları

Bu çalışmada program, alan literatürü takip edilerek ve ortalama bir girişimcilik etkinliğinin formatı modellenerek aşağıdaki araştırma sorularına cevap aramak üzere tasarlanmıştır: Girişimci ekosistemin geliştirilmesini hedefleyen başarılı girişimcilerin yer aldığı pek çok etkinlik düzenlenmektedir. Bu etkinlikler gerçekten gençleri girişimci olmaya teşvik ediyor mu ve girişimcilik ekosisteminin büyümesine gerçekten yardımcı oluyor mu? Başarı hikayelerinin birincil amacı bireyleri cesaretlendirmek olsa da, tam tersine insanlar üzerinde cesaret kırıcı bir etki yaratması mümkün müdür?" Çalışmanın belirlenen odağına ek olarak, tasarlanan programın katılımcıların girişimcilik bilgi ve becerileri düzeyine ilişkin önemli sonuçlar üretmesi beklenmektedir; daha spesifik olarak, girişimcilik becerilerinde bir artışa yol açacak olan girişimci bilgi düzeyini geliştirmesi beklenmektedir.

Literatür Araştırması

Girişimcilik eğitiminin nasıl tasarlanması gerektiğine ilişkin olarak araştırmacıların halen uzlaşmış olduğu başarılı bir girişimcilik eğitim modeli bulunmamaktadır (Rasmussen ve Sorheim, 2006). Bu çalışmada, Türkiye Girişimcilik Stratejisi ve Eylem Planı çerçevesinde tasarlanan Ağ ve Teknoloji Odaklı Uygulamalı Girişimcilik (ATOG) programının Chickering ve Gamson'un (1987) geliştirdiği Yükseköğretimde İyi Uygulama için Yedi İlke kapsamında uygulanmasının lisans öğrencilerinin algılanan davranışsal kontrol, girişimcilik eğilimi, bilgi ve becerisi üzerine etkisi incelenmiştir. Yükseköğretimde İyi Uygulamalar İçin Yedi İlke (Kocaman Karoğlu vd., 2014), girişimcilik eğitimi verenler de dahil olmak üzere yükseköğretim ortamlarındaki çeşitli çalışmalardan elde edilen bulguların derlenmesiyle geliştirilmiş bir kılavuzdur. Bu çalışma, aşağıda özetlenen yedi ilkeden yararlanmaktadır: •Öğrenciler ve öğretim üyeleri arasındaki iletişim •Öğrenciler arasında karşılıklılık ve iş birliği • Hızlı geri bildirim • Görev süresi •Yüksek beklentiler •Çeşitli yetenekler ve öğrenme yolları. İlgili literatürün gözden geçirilmesi, girişimcilik eğitiminin kapsamı ve tasarımına ilişkin soruların halen devam eden araştırmalar olduğunu ortaya koymaktadır (Cavelheiro vd., 2020; Qureshi & Mian, 2020; Saengchai & Sutduean, 2019; Xu, 2019). Geçmişte, gençlerin girişimciliğe olan ilgisi yöneticiler, araştırmacılar ve eğitimciler tarafından küçük ve önemsiz görülüyordu; ancak bu

muazzam artan ilgi artık iş dünyasında önemli bir devrim olarak görülüyor. Girişimcilik programlarının ve kurslarının çoğu, gençlerin girişimcilik bilinci kazanmaları, girişimci davranışlar sergilemeleri ve bu amaç doğrultusunda kariyerlerini geliştirmeleri konusunda destek olmaktadır. Bu nedenle, girişimcilik eğitim ve öğretim programları sayesinde girişimcilik eğilimlerinin artırılabileceği sonucuna varılabilir; bu, paralel bulgular üreten çeşitli bilimsel araştırmalarla kanıtlanmış bir gerçektir (Bagheri & Pihie, 2014). Girişimcilik eğilimlerini yakından inceleyen modellerden biri Ajzen (1991) tarafından önerilen "Planlanmış Davranış Teorisi" (Jakopec vd., 2013) isimli model, bireylerin davranışlarını tahmin etmek ve açıklamak için kullanılmaktadır. Kişinin tutum ve davranış arasında ilişki kurma niyetine yönelik eylemlerinin bütünüdür (Hattab, 2014:4; Ajzen, 1991; Xiao & Wu 2008). Bu teorinin temel çerçevesi, bir kişinin hem bir şeyi yapıp yapamayacağını nasıl algıladığı hem de belirli bir davranışı ne ölçüde kontrol edebileceğini nasıl algıladığı olarak tanımlanabilecek algılanan davranışsal kontrole dayanmaktadır (Linan & Chen, 2006). Girişimcilik eğitimini Planlanmış Davranış Teorisi kapsamında ele alan çalışmalar dikkate alındığında, girişimcilik eğitimi programlarının algılanan davranışsal kontrol üzerinde olumlu bir etkiye sahip olduğunu kanıtlayan sonuçlara sahip çalışmaların da olduğu keşfedilmiştir (Rauch & Hulsink, 2015; Karimi vd., 2012). Girişimcilik niyetine ek olarak, bilgi geliştirmenin de girişimcilik eğilimi üzerinde etkisi bulunmaktadır. Üniversite öğrencilerine sunulan inovasyon ve girişimcilik eğitim sistemi, girişimcilik bilgi ve becerilerine dayanmaktadır. Üniversite öğrencileri, temel girişimcilik bilgilerini edinerek ve girişimciliğin temel nitelikleri hakkında farkındalık kazanarak girişimcilik becerilerini geliştirirler (Jia & Yuan, 2018). Bu noktada girişimcilik bilgisindeki artış, girişimciliğe yönelik faaliyetlere ilişkin daha gerçekçi algıların oluşmasına yol açmaktadır. Dolayısıyla bilgideki artış girişimcilik niyetini dolaylı olarak etkilemektedir (Linan & Chen, 2006). Bahsi geçen çalışmalar, girişimcilik ekosisteminin büyümesini teşvik etmek için önemli miktarda zaman, çaba ve finansal kaynak harcanarak düzenlenen girişimcilik etkinlikleri ve başarılı girişimcilerin katılımının girişimciliğe nasıl katkıda bulunduğunu gösterirken, girişimcilik eğitiminin akademik olarak çok ilgi gördüğünü göstermektedir. Bu olayların etkisi, özellikle Türkiye'de henüz araştırılmamıştır. Bu çerçeveden hareketle, başarılı girişimcilerin katılımıyla gerçekleştirilen etkinliklerin, genç yetişkinleri girişimci olmaya özendirmek ve girişimcilik ekosistemini beslemek amaçlarına katkısı burada çalışmanın konusunu oluşturmaktadır.

Yöntem

Değişkenlerin "ilişkisel araştırma" yoluyla ve "tek grup ön test-son test" ön deneysel araştırma deseni kullanılarak incelendiği bu çalışmada nicel bir yaklaşım izlenmiştir. Öğrencilerin algılanan davranış kontrolü, girişimcilik niyeti, bilgi ve becerileri üzerindeki etkilerini değerlendirmek üzere başarılı girişimcilerin katılımı ve etkinlikleri kapsayan uygulamalı girişimcilik programı 13 hafta boyunca 2 dönem uygulanmış. Analizlerde eşleştirilmiş ön test-son test verileri kullanılmıştır. Araştırma Türkiye'de üniversitede gerçekleştirilmiştir. Bu çalışma için girişimcilik seçmeli dersinin içeriği yeniden tasarlanmıştır. Ders yeni versiyonu ile Girişimcilik Genel Seçmeli olarak açılmış ve bu derste

yeni tasarlanan ATOG programı işlenmiştir. Bu tür sınıfların tasarımı ve sunumu doğası gereği maliyetli ve emek yoğun olduğundan, çalışmanın bu kısmı için SDÜ Bilimsel Araştırma Projeleri Koordinasyon Birimi tarafından 26857.14 ABD Doları destek sağlanmıştır. Çalışmanın etik izni Süleyman Demirel Üniversitesi etik kurulundan 2020/55213 alınmıştır. Bu araştırma kapsamında iki çalışma yürütülmüştür. Her iki çalışmaya da ön test ile başlanmış, ardından ders içeriği uygulanmış ve ardından son test uygulanmıştır. Ön testlerin son testlerle eşleştirilmesi kişiye özel kod sistemi ile sağlanmıştır. Katılımcılardan kendi 8 haneli kodlarını oluşturmaları, ön testte belirlenen alanda göstermeleri ve bu kodu cep telefonlarının kişi listesine kaydetmeleri istenmiştir. Daha sonra son testi tamamlarken aynı kodu girmeleri istenmiştir. Çalışma 1'in amacı, bir kontrol grubu oluşturmadan B Tipi Sınıfların öğrencilerin duygusal zekâsı üzerindeki etkisini incelemektir. Çalışma 1'den elde edilen uygulama deneyimi, geri bildirim ve veriler daha sonra Çalışma 2'yi tasarlamak için kullanılmıştır; sadece B tipi ders alan öğrencilerin değil, aynı zamanda A tipi ders alan öğrencilerden oluşan bir kontrol grubu da dahil edilmiştir. Öğretim elemanlarının bireysel farklılıklarından kaynaklanabilecek yanlılıkları önlemek amacıyla, ATOG programını yürüten aynı öğretim üyesinin sınıfına kaydolacak öğrencilerin katılımıyla kontrol grubu oluşturulmuştur.

Sonuç ve Değerlendirme

Araştırma bulgularına göre başarılı girişimciler ve etkinliklerle dizayn edilen girişimcilik dersi, sınıf ortamında tek bir eğitimci ile gerçekleştirilen etkinliksiz girişimcilik dersine göre katılımcılarda daha iyi bir gelişim potansiyeline sahip olsa da algılanan davranışsal kontrol gelişimini dikkate alan bir dizayna sahip olmadıkça fayda üretmeyecektir.

1. INTRODUCTION

In this study, within the framework of Turkey Entrepreneurship Strategy and Action Plan, Chickering and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education" was applied in the design of the Network and Technology-Oriented Applied Entrepreneurship (NTOE) undergraduate program in Süleyman Demirel University (SDU), Turkey. This program was designed for a student-centered blended learning environment, combining face-to-face trainings with online activities with mentors. Being a pioneer in this field in Turkey in terms of its contribution to the local entrepreneurial ecosystem, the NTOE program bears significance in the sense that it provides a practical application of the Good Practice Principles in blended learning.

Many events are organized with successful entrepreneurs, in an attempt to advance the entrepreneurial ecosystem. In this context, what effect the NTOE program, in which successful entrepreneurs are introduced to students to be followed by active activities, creates on perceived behavioral control (PBC) development and entrepreneurial tendencies of young people is studied. In addition, the general tendencies and academic achievement of undergraduate students as young entrepreneur candidates before the NTOE program have been traced as a part of this study, to investigate the program's impact on the development of their knowledge and skills on entrepreneurship, and to find out if demographic variables such as age, gender, social class or other background features have influenced the contribution that NTOE program has made in their lives.

2.LITERATURE REVIEW

The Seven Principles for Good Practice in Undergraduate Education (Kocaman Karoğlu et al., 2014) is a guideline developed by gathering findings from a range of studies in higher education environments, including those hosting entrepreneurship education. This study makes use of the seven principles as outlined below:

- *Contact between students and faculty*
- *Reciprocity and cooperation among students*
- *Prompt feedback*
- *Time on task*
- *High expectations*
- *Diverse talents and ways of learning*

A review of the relevant literature reveals that questions as to the scope and design of entrepreneurship education are still under ongoing investigation (Cavelheiro et al., 2020; Qureshi & Mian, 2020; Saengchai & Sutduean, 2019; Xu, 2019). In the past, young people's appeal to entrepreneurship was considered small and trivial by managers, researchers and educators; however, this hugely growing interest is now seen as a significant revolution in the business world. The majority of entrepreneurship programs and courses support young people in terms of gaining awareness of

entrepreneurship, displaying entrepreneurial behaviours, and building up their careers with this aim in mind. Therefore, it may be concluded that entrepreneurial tendencies may indeed be raised thanks to entrepreneurship education and training programs, a fact well-proven by various scientific studies that have produced parallel findings (Bagheri & Pihie, 2014). One of the models that take a closer look to entrepreneurial tendencies is the one proposed by Ajzen (1991), titled "The Theory of Planned Behaviour" (Jakopec et al., 2013) is used for predicting and explaining individuals' behaviours, defined as the totality of an individual's actions taken toward the intent to make a correlation between attitude and behaviour (Hattab, 2014:4; Ajzen, 1991; Xiao & Wu 2008). The essential framework of this theory is based on PBC that may be described as both how a person perceives whether she/he is capable of doing something and how she/he perceives the extent to which they can control a certain behavior (Linan & Chen, 2006). When the studies that deal with entrepreneurship education within the scope of the Theory of Planned Behaviour are taken into consideration, it has been discovered that there are also studies with results proving that entrepreneurial education programs have a positive effect on PBC (Rauch & Hulsink, 2015; Karimi et al., 2012).

In addition to entrepreneurial intent, improvement of knowledge also has an effect on entrepreneurial tendency. The innovation and entrepreneurship education system offered to college students is based on entrepreneurial knowledge and skills. College students build their entrepreneurial skills by acquiring basic entrepreneurial knowledge and gaining awareness on essential qualities of entrepreneurship (Jia & Yuan, 2018). At this point, an increase in the knowledge on entrepreneurship leads to more realistic perceptions about activities regarding entrepreneurship. Therefore, the increase in knowledge indirectly affects entrepreneurial intention (Linan & Chen, 2006).

The aforementioned studies indicate that entrepreneurship education has drawn much academic attention while entrepreneurship events – which are organized by spending considerable amounts of time, effort and financial resources just to promote the growth of the entrepreneurial ecosystem – and how the attendance of successful entrepreneurs contributes to the impact of these events have not yet been studied, especially in Turkey. Following this frame of context, the subject of study here is the contribution of events that are carried out with the participation of successful entrepreneurs in the goals of encouraging young adults to become entrepreneurs and fostering the entrepreneurial ecosystem.

3. RESEARCH QUESTION AND HYPOTHESES

The course program implemented in this study was designed by following the field literature outlined above and by modeling the format of an average entrepreneurship event, in order to seek answers for the following research questions: "Many events are organized with successful entrepreneurs, in an attempt to advance the entrepreneurial ecosystem. Do these activities really encourage young people to become entrepreneurs and do they really help the entrepreneurial ecosystem grow? Although the primary objective of success stories is to encourage individuals, is it possible that on the contrary,

they create a discouraging effect on people?" In addition to the defined focus of the study, the designed course program was expected to produce significant outcomes regarding the level of entrepreneurial knowledge and skills of participants; more specifically, to improve the level of entrepreneurial knowledge which, in return, would lead to an increase in entrepreneurial skills.

In the course of this examination, the following concepts and abbreviations were used:

Type A class refers to entrepreneurship classes led by a single faculty member in the traditional classroom environment, without any activities (control group).

Type B class refers to entrepreneurship classes designed to include activities and engage successful entrepreneurs (experiment group).

EI refers to Entrepreneurial Intention.

PBC refers to Perceived Behavioural Control.

ES refers to Entrepreneurial Skills.

EK refers to Entrepreneurial Knowledge.

Based on the literature review and research questions mentioned earlier, the hypotheses of this research study were constructed as follows:

Despite Linan and Rodriguez's (2004) emphasis on entrepreneurship education as a prerequisite for the development of entrepreneurial intention; in another related study which investigates this relationship, entrepreneurship education was not found to have a great effect on entrepreneurial intention (Linan et al., 2011). Hypothesis H1 was constructed to test if entrepreneurial education really does not contribute to an increase in EI.

H_1: Type B classes do not account for an increase in EI

A review of the literature, although there has been changes over time, reveals that a factor of the Theory of Planned Behaviour; namely, PBC plays an essential role in determining entrepreneurial intention (Liñán & Rodríguez, 2004). PBC, as designed by Ajzen (2002), is comprised of two elements: self-efficacy and perceived controllability. Self-efficacy deals with internal control factors such as knowledge and skills, and it refers to an individual's perceptions about their ability or difficulty to engage in a particular behaviour. Perceived controllability, on the other hand, involves external control factors such as resources, opportunities and potential obstacles; it reflects to what extent the individual perceives that engaging in that particular behaviour is up to themselves. With regard to the design of an entrepreneurship education program, it would be useful to determine the conditions under which PBC increases and decreases. In the given context, changes in self-efficacy and perceived controllability would be expected to have an effect on PBC. In addition, having positive attitudes and receiving support from one's environment is expected to lead to an increase and PBC; as suggested by a model that has

been developed by researchers investigating this specific issue (Ajzen, 2002; Eagly & Chaiken, 1993; Fishbein, 2007). Furthermore; the level of importance attributed to attitudes, subjective norms and PBC can be seen to differ across different behaviours. Thus, it can happen that attitude alone has a major impact on entrepreneurial intention or that attitude and PBC play a significant role, or that all three determinants are nevertheless sufficient to explain entrepreneurial intentions (Karali, 2013). Taking these prior findings into consideration, Hypothesis H2 was constructed as follows:

H_2: In type B classes, increase in EI depends on the increase of PBC.

Entrepreneurship education and training has an influence both on the individual's current behaviour and on their future intentions (Kolvereid & Moen, 1997; Tkachev & Kolvereid, 1999). In other words, there are significant differences between students who have taken a course or courses on entrepreneurship and those who have not. However, the point of interest here is the question if there is any causal relationship between variables of education (course content, teaching methods, teacher profile, resources and support, etc.) and direct intention and/or precursors of behaviour (attitudes, values, knowledge, etc.) (Fayolle et al.,2006). The work of Begley et al. (1997), having produced results which reveal a statistically significant correlation between entrepreneurial intention and the number of classes that are aided with events. In the light of these prior findings in the literature, hypothesis H3 for this study was constructed as below:

H_3: Type B classes have a stronger potential than type A classes for developing sustainable entrepreneurial intent.

4.METHOD

A quantitative approach was followed for this study, where the variables were examined through "relational research" and using the "one-group pretest-posttest" type of pre-experimental research design. Pre-experimental design is used in cases where random assignment or a control group is not available and it is difficult to apply the classical design. The one-group pretest-posttest design is a type of pre-experimental design in which a single group first receives a pretest before the intervention, then the intervention takes place and it is followed by a posttest (Neuman, 2007).

The research was conducted at SDU in Isparta, Turkey. For this study, the content of the elective course on entrepreneurship was redesigned. With its new version, the course was offered as the Entrepreneurship General Elective and the newly designed program NTOE was delivered in this course. Since the design and delivery of this type of classes are by nature costly and labor-intense, a support funding of USD 26857.14 was provided by SDU Coordination Unit for Scientific Research Projects for this part for the study.

Two studies were administered as part of this research. Both studies were started with a pretest, then the course content was administered, followed by a posttest. Matching the pretests with the posttests was made possible by a personal code system. Participants were asked to create their own 8-digit code, to be displayed in the defined area of the pretest, and to save this code in their mobile phone's contact list. They were then asked to enter the same code when completing the posttest.

The aim of Study 1 was to examine the effect of Type B Classes on the EI of students, without the construction of a control group. The implementation experience, feedback and data obtained from Study 1 was then used to design Study 2; in which not only students receiving type B classes but also a control group of students receiving type A classes was included. To avoid any biases resulting from individual differences of professors, the control group was constructed with the participation of students who were to be enrolled in the class of the same faculty member who delivered the NTOE program.

4.1. Data Collection Tools

The data for this study was collected by way of Linan and Chen's (2009) Entrepreneurial Intentions Questionnaire (EIQ), Entrepreneurial Knowledge (EK) and Entrepreneurial Skills (ES) (Evans, 2009; Linan et al., 2008). Howewer the original versions of these scales are used by 7 poing Likert choices, 5 point Likert versions (Bosch, 2013; Kerrick, 2008; Malebana, 2014) were adapted to Turkish by Uygun and Güner (2016).

The Core Entrepreneurial Intention Model developed by Linan and Chen (2009) is comprised of four elements: Entrepreneurial Intention (EI), Personal Attitude (PA), Subjective Norm (SB) and Perceived Behavioural Control (PBC). The two subfactors of the EIQ scale, PBC and EI were extracted from the model for the purpose of this study. In addition to the EIQ, EK and ES (Evans, 2009; Linan et al., 2008) were used for collecting data. Question examples and details of these scales are given below:

Entrepreneurial Intention (EI) was measured by 5 statements like "I have very seriously thought of starting a firm" and "I will make every effort to start and run my own firm" with response options being (1) Strongly Disagree to (5) Strongly Agree.

Perceived Behavioural Control (PBC) was measured by 4 statements like "I know the necessary practical details to start a firm" and "If I tried to start an organization, I would have a high probability of succeeding" with response options being (1) Strongly Disagree to (5) Strongly Agree.

The Entrepreneurial Knowledge Scale (EK) was made up of 7 statements like "My level of knowledge in planning for the execution of a business or project" and "My level of knowledge in developing an innovative product or service" with response options being (1) None, (2) Low, (3) Moderate, (4) High, (5) Very High.

The Entrepreneurial Skills Scale (ES) was made up of 7 statements like "Problem solving skills", with response options being (1) Very low, (2) Low, (3) Moderate, (4) Good, (5) Very good.

The abovementioned dimensions EI, PBC, EK and ES together constitute the research variables of this study. Reliability values – Cronbach's alphas – for the relevant scales were found to be ranging from .776 to .953 for Linan and Chen's (2009) entrepreneurial intention model; .890 for Entrepreneurial Knowledge (Linan, 2005) and .858 for Entrepreneurial Skills (Linan, 2008).

4.2. Data Analysis

SPSS 23.0 was used for analyzing the data collected in this study. The bootstrap procedure (DiCiccio & Efron, 1996; Grunberg, 2001; Hayes & Preacher, 2013), which is generally used in t-tests and regression analyses as an alternative to nonparametric tests, was preferred. In the mentioned tests, results of the data analysis were obtained from 5000 bootstrap replications. The heteroskedasticity technique proposed by Hayes and Cai (2007), was used in the regression tests. As for correlation tests, since there were data sets that were not normally distributed, all data was analyzed using the Spearman test.

The moderation models were tested through the PROCESS v2.15 macro developed by Hayes (2013). 5000 bootstraps were performed here, too. Based on Aiken and West's (1991) recommendation, all predictors were mean centered prior to analysis. Unstandardized coefficients were preferred when presenting values for effect size, in line with the thoughts of Kim and Mueller (1981) and Hayes (2013), who state that unstandardized coefficients brings more clarity to results, making them more comprehensible.

4.2.1. Study 1

In the first semester, the aim of the study was to investigate the effect of type B class on the development of student EI, without a control group. This study was planned to serve as a pilot for the actual study, which was implemented in the second semester. The weekly NTOE program comprised of two class hours (theoretical-conceptual and game-based) and two hours of mentoring sessions. The course requirements were to participate in the theoretical-conceptual and game-based classes, to set up a team, to assign roles and responsibilities within the team, to come up with a business idea, to conduct interviews with mentors, to make observations, to make use of the knowledge and experience of business people, to take part in business idea competitions and to make a presentation in the NTOE workshop at the end of the semester.

On the fourth week of the NTOE program; 33 mentors, highly specialized in their fields, were matched with 28 groups of business ideas. The teams were expected to meet their mentors weekly, either face-to-face or via online tools. However, the mentors participated in the program on a voluntary basis, and because most of them were active business people working on a full agenda, they could not always make it to the team meetings. At the end of the semester, the first NTOE Workshop was carried out as planned, in the presence of the jury – officials from organizations which fund entrepreneurs and support

education programs on entrepreneurship (A list of collaborating organizations is provided in supplementary material appendix 1). Teams pitched their business ideas to the members of the jury, each of whom were competent in their field, and 3 best business ideas were selected. Due to budget constraints, the winners could not be presented with a prize.

Participants

342 students took the general elective course on entrepreneurship in fall semester; all of them were invited to participate in the research. The pretest and the posttest were administered to all students who were present on the days of testing. 224 students took the pretest and 237 took the posttest. No additional action was taken to reach out to those who missed a test. As a result, 164 students whose pretest and posttest data were successfully matched were defined as the study sample.

49.4% of these 164 students were female and 50.6% were male. Almost all students were in the 19-24 age range, except for one who was 28 years old. Given this range, most students (90.2%) were below age 22. Among all students, 23.2% were in second grade, 64.0% in third grade, and 12.8% were in fourth grade. 49.4% of subjects were from the Faculty of Economics and Administrative Sciences, 32.9% from faculties of Engineering and Technology, and 6.1% were from the Faculty of Arts and Sciences. The remaining 11.6% were from 6 other faculties.

Results

The pretests and posttests aimed to collect data for assessing the dimensions of EI, PBC, ES and EK. The reliability values were found to range between .751 and .871. Δtest values were calculated for each dimension by subtracting pretest scores from posttest scores for every individual, thus creating a new data set for the difference in dimensions. The difference test between posttest and pretest data was conducted using the paired samples t-test. Findings are presented in Table 1.

Table 1. Descriptive Statistics and T Tests

Dimension		*Pretest*	*Posttest*	*Δtest*	*p*	*LLCI*	*ULCI*
EI	μ	3.612	3.611	-.001	.988	-.126	.126
	sd	*.876*	*.779*	.820			
	(α)	(.869)	(.836)				
PBC	μ	3.745	3.853	.108	.128	-.028	.245
	sd	*.858*	*.712*	.909			
	(α)	(.828)	(.817)				
ES	μ	3.766	3.826	.060	.181	-.024	.145
	sd	*.611*	*.607*	.553			
	(α)	(.751)	(.799)				
EK	μ	3.356	3.600	**.244**	**.000**	.144	.346
	sd	*.675*	*.661*	.645			
	(α)	(.850)	(.871)				

α: Cronbach's Alpha
N = 161 (Cases excluded listwise)

After a semester of relevant activities, there was no statistically significant change in the EI, PBC and ES values of participants ($p>.05$). Activities over one semester appear to have made no

significant change in the measured skills, which are expected to increase the likelihood that an individual's may engage in entrepreneurship behavior. Successful entrepreneurs may be expected to inspire students and foster a kind of growth that happens multiple dimensions, starting with entrepreneurial intention. The findings of this study, where narratives of unsuccessful entrepreneurs were omitted. The program did nevertheless contribute to students' entrepreneurial knowledge (p<.001), a skill which does not require the kind of costly and complicated organizations investigated in this study.

The data for EI and ΔEI variables were analyzed for their relation to other dimensions, in order to understand the potential of type B class. To get a grasp of the relation between EI and other dimensions, an analysis was conducted using only the pretest data which was gathered before the start of the program. Δtest represents the change that occurred in the dimensions after the program was implemented. Observing Δtest data for variables that are correlated to ΔEI and analyzing these relations in terms of their similarity to the correlation of EI with other dimensions on normal conditions is crucial for an understanding of the potential impact of type B class. Table 2 demonstrates correlations between dimensions based on the analysis of pretest and Δtest data.

Table 2. Correlations Among the Dimensions According to Pretest and Δtest Data

Dimension	*EI*	*PBC*	*ES*	Dimension	Δ*EI*	Δ*PBC*	Δ*ES*
	Pretest (N = 163)				Δtest (N = 161)		
EI				Δ*EI*			
PBC	.693*			Δ*PBC*	.554*		
ES	.486*	.507*		Δ*ES*	.272*	.286*	
EK	.455*	.464*	.661*	Δ*EK*	.300*	.224*	.422*

*p < .01

The analysis of the pretest data revealed that EI was significantly correlated with all other dimensions (p<.01). PBC was found to have the strongest correlation with EI. The analysis of Δtest data also produced similar findings. All dimensions were significantly correlated to ΔEI (p<.01). According to correlational analyses, the data on change can be said to have a similar structure to pretest data with some size differences.

The data must be compared with that of a control group who received a standard course on entrepreneurship. In Study 1, a control group was not recruited, since it was intended to serve as a pilot. Then the experience gained in the pilot was used to revise the program to plan and implement higher quality activities for the next semester. Based on the experience and feedback received from the first study, Study 2 was designed. A control group was also constructed for this second phase.

4.2.2. Study 2

The second version of the NTOE program was improved in some aspects. Student feedback from the first NTOE was considered, and the second program had icreased flexibility for a more student-centered approach. The regional and corporate mentors who were inactive were replaced by new mentors, who were recruited through a nation-wide online ad. 40% of mentors were recruited through

this platform, while mentors who were active in the first program continued to participate in the second one. The number of mentors increased to 42 in this program. The problems in the online support platform web portal were resolved and the overall performance of the system was improved.

Participants

The experiment group was made up of 254 students who attended type B class. Out of this group, the pretest and posttest of 85 students could be matched, meaning they were present on the day of testing and took both tests. 52.9% of these participants were female and 47.1% were male. Almost all subjects were in the 18-26 age range, except for one who was 29 years old. Given this range, most subjects (91.8%) were 23 years old or below. Among all subjects, 39.5% were first grade students 23.5% in second grade, 21.0% in third grade, and 16.0% were in fourth grade. 25.9% of subjects were from the Faculty of Economics and Administrative Sciences, 37.6% from faculties of Engineering and Technology, 10.6% from the Faculty of Health Sciences, 8.2% from the Faculty of Forestry, and 7.1% were from the Faculty of Arts and Sciences. The remaining 10.6% were from 4 other faculties.

The control group was created by recruiting a whole class of students taking the departmental elective on entrepreneurship at the Faculty of Economics and Administrative Sciences. The content of this course was delivered in the conventional classroom by a single faculty member. From a total of 99 students in the control group, the pretest and posttest of 48 students could be matched, meaning they were present on the day of testing and took both tests. In the control group, 60.4% of participants were female and 39.6% were male. Almost all subjects were in the 19-23 age range, except for one participant who was 26 years old. Given this range, most subjects (91.7%) were 21 years old or below. Almost all were in their second year (89.6%), with only 6.3% studying their third year, and 4.2% their fourth year.

The control and experiment groups were similar in the distribution of their demographic data, especially in terms of gender and age. However, the two groups differed in terms of the academic field of their subjects. While the experiment group comprised of students from various faculties, the control group was homogenous; all were students of the Faculty of Economics and Administrative Sciences. At this point, it is important to note that the main aim of the study is not to investigate differences of level between control and experiment groups, but rather to observe any differences that may occur in the relations between variables. Therefore, it was assumed that the abovementioned difference between two groups would not impose a risk on the validity of findings.

Results

The pretest and posttest data pertaining to the experiment group was analyzed. The reliability values were found to range between .772 and .884. Δtest values were calculated for each dimension by subtracting pretest scores from posttest scores for every individual, thus creating a new data set for the

difference in dimensions. A difference test between posttest and pretest data was conducted using the paired samples t-test. Findings are presented in Table 3.

Table 3. Descriptive Statistics and T Tests for Experiment Group

Dimension		*Pretest*	*Posttest*	Δ*test*	*p*	*LLCI*	*ULCI*
EI	μ	3.694	3.526	**-.168**	**.040**	-.325	-.008
	sd	*.807*	*.848*	.759			
	(α)	(.841)	(.853)				
PBC	μ	3.884	3.626	**-.258**	**.002**	-.411	-.104
	sd	*.734*	*.713*	.733			
	(α)	(.772)	(.808)				
ES	μ	3.635	3.634	-.001	.980	-.105	.105
	sd	*.612*	*.699*	.498			
	(α)	(.797)	(.833)				
EK	μ	3.110	3.251	.141	.070	-.004	.291
	sd	*.733*	*.716*	.694			
	(α)	(.868)	(.884)				

α: Cronbach's Alpha
N = 84 (Cases excluded listwise)

Results indicate that after a semester of relevant activities, an improvement in the EI levels of participants was not observed. On the contrary, the EI levels were found to have dropped by the end of the program (p<.05). Type B classes were not found to be effective in increasing the EI levels of participants, neither in the first NTOE nor in the second NTOE. In the light of these results, H_1: "Type B classes do not account for an increase in EI" was accepted.

The only dimension whose value increased was EK. The increase in this variable is only significant at a 93% level of confidence. The most striking finding is that the PBC levels of participants were decreased (p<.01). Type B class had a negative effect on the PBC levels of students. The decrease in EI could be related to the decrease in PBC levels. An analysis of structural relations focusing on this issue is presented later in this report.

The reliability values for control group were found to range between .712 and .856. Means, standard deviations and the results of the difference test for pretest, posttest and Δtest values are presented in Table 4.

Table 4. Descriptive Statistics and T Tests for Control Group

Dimension		*Pretest*	*Posttest*	Δ *test*	*p*	*LLCI*	*ULCI*
EI	μ	3.314	3.409	.096	.366	-.104	.298
	sd	*.777*	*.695*	.712			
	(α)	(.812)	(.712)				
PBC	μ	3.649	3.696	.047	.726	-.181	.306
	sd	*.767*	*.698*	.852			
	(α)	(.752)	(.744)				
ES	μ	3.732	3.775	.043	.448	-.071	.148
	sd	*.591*	*.576*	.390			
	(α)	(.724)	(.779)				
EK	μ	3.237	3.449	**.212**	**.005**	.066	.355
	sd	*.670*	*.688*	.512			
	(α)	(.834)	(.856)				

α: Cronbach's Alpha
N = 48 (Cases excluded listwise)

Students who attended type A classes only improved in their EK levels (p<.01). Their levels of EI, PBC and ES did not demonstrate any significant improvement.

These results may indicate, at a first glance, that neither type A classes nor type B classes lead to an increase in EI. Type B classes are known to be costly, but here they also produced negative effects. A direct interpretation in the light of this information could lead to the suggestion that expenditures for organizing such activities are inappropriate. However, broader analyses may offer important findings that clear the way. In line with this perspective, correlations between dimensions were calculated individually for pretest and Δtest data collected from control and experiment groups. Table 5 demonstrates the results of these analyses.

Table 5. Correlations Among the Dimensions According to Pretest and Δtest Data

Dimension	*EI*	*PBC*	*ES*	Dimension	Δ*EI*	Δ*PBC*	Δ*ES*
Experiment	Pretest (N = 85)				Δtest (N = 84)		
EI				Δ*EI*			
PBC	.670**			Δ*PBC*	.513**		
ES	.455**	.486**		Δ*ES*	.380**	.105	
EK	.414**	.461**	.712**	Δ*EK*	.306**	.105	.453**
Control	Pretest (N = 48)				Δtest (N = 48)		
EI				Δ*EI*			
PBC	.403**			Δ*PBC*	.134		
ES	-.031	.363*		Δ*ES*	.157	.229	
EK	-.054	.319*	.731**	Δ*EK*	.231	-.027	.422**

* p < .05, ** p < .01

Findings from the experiment group are similar to those from the first NTOE program (see Table 2). According to pretest findings PBC has the strongest correlation to EI (p<.01). A similar condition exists for ΔEI; ΔPBC has the strongest correlation to ΔEI (p<.01). Correlations under normal conditions (before the start of the program) are similar to correlations between the changes produced by the program. The control group findings, too, suggest that PBC has the strongest correlation to EI (p<.01). However, the Δtest results for the control group indicate no correlations between ΔEI and other dimensions (p>.05). To illustrate this aspect more clearly, the effect sizes of dimensions over EI were calculated by by analyzing them altogether. The results of the regression analysis conducted for pretest and Δtest are demonstrated in Table 6.

Table 6. Factors Affecting EI and ΔEI According to Pretest and Δtest Data

EI predictors	*β*	*SE*	*p*	ΔEI predictors	*β*	*SE*	*p*
Experiment	R^2 = .515				R^2 = .356		
	$F(3.\ 81) = 27.631$. $p < .001$				$F(3.\ 80) = 5.977$. $p = .001$		
PBC	**.721**	**.144**	**< .001**	Δ*PBC*	**.523**	**.160**	**.002**
ES	.089	.151	.556	Δ*ES*	.322	.179	.076
EK	.059	.115	.612	Δ*EK*	.038	.178	.832
Constant	.388	.408	.345	*Constant*	-.038	.077	.622
Control	R^2 = .265				R^2 = .305		
	$F(3.\ 44) = 11.372$. $p < .001$				$F(3.\ 44) = 2.505$. $p = .071$		
PBC	**.529**	**.104**	**< .001**	Δ*PBC*	.421	.250	.100
ES	-.244	.222	.278	Δ*ES*	-.296	.269	.277
EK	-.132	.163	.420	Δ*EK*	**.454**	**.197**	**.026**
Constant	2.722	.749	< .001	*Constant*	-.008	.101	.941

Experiment pretest $N = 85$, experiment Δtest $N = 84$, control pretest $N = 48$, control Δtest $N = 48$

The pretest values of both control and experiment groups demonstrate results that are similar to those of the first NTOE program. Out of the research variables of PBC, ES and EK; PBC was the only variable which predicts EI levels in control and experiment groups ($p<.001$). In normal conditions, PBC is a key dimension for determining an individual's EI. Therefore, an education program which aims for EI development must definitely include PBC development in its design. Contrary to these findings, results obtained from the Δtest data for control and experiment groups suggest other patterns.

The Δtest data for the experiment group exhibits a similar structure to pretest data. The only variable which predicts ΔEI is ΔPBC ($p<.01$). Other dimensions do not have a significant effect ($p>.05$). This structure is dissimilar to that of the control group. In the control group, ΔEK is the only variable that predicts ΔEI ($p<.05$). While in the experiment group changes in EI were dependent on changes in PBC, in the control group they are dependent on changes in EK. In the light of these findings, the hypothesis H_2: "In type B classes, increase in EI depends on the increase of PBC" was accepted.

The EI levels of participants were found to have decreased as a result of type B class (see Table 3). On the other hand the results of the regression analyses indicate that changes in PBC are a strong determinant of changes in EI. It was concluded that the decrease in PBC was one of the main factors that accounted for the decrease in EI. A significant increase in EK was observed after type A class was administered, whereas this increase did not account for a significant increase in EI (see Table 4). EI development based only on knowledge cannot provide a sustainable base for entrepreneurship skills.

When type A classes and type B classes are compared in terms of the data structure of their difference (Δ data set), it can be suggested that type B activities make way for improvements that are more sustainable. Although type B class did not succeed in improving EI, the results indicate that it has a higher potential to be a means for this end. As a conclusion, H_3: " Type B classes have a stronger potential than type A classes for developing sustainable entrepreneurial intent." was accepted.

NTOE programs were followed by increased EK levels for all groups, but this increase did not account for an increase in EI. Although there is no strong evidence of ΔEK's impact on ΔEI, ΔPBC was

found to moderate the effect of ΔEK on ΔEI. R^2 change of the model that was tested using Δtest data from the second NTOE program was found to be significant (ΔR^2=.076, p<.001). When ΔPBC is low (-1 *SD*) there is a non-significant relationship between ΔEK and ΔEI (β=−.09, *SE*=.13, t=−.71, p>.1). At the mean value of ΔPBC there is a very weak significant positive relationship between ΔEK and ΔEI (β=.16, *SE*=.11, t=1.45, p=.06). When ΔPBC is high (+1 *SD*) there is a stronger significant positive relationship between ΔEK and ΔEI (β=.41, *SE*=.12, t=3.39, p<.001). In view of these findings, it can be concluded ΔPBC moderates the effect of ΔEK on ΔEI (for details see supplementary material appendix 2). Entrepreneurial knowledge is another important factor which can only have an effect on entrepreneurial intention in the presence of a high PBC. It becomes certain once more that developing a PBC over becoming entrepreneurs is of critical importance in entrepreneurship classes where successful entrepreneurs are intended to participate.

4.3. Ethical Permission

Ethical permission of the study was obtained by ethics committee of Süleyman Demirel University, 2020/55213.

5. RESULTS

This study investigates the effect of the undergraduate education program of NTOE on the entrepreneurial intention of students, in the frame of the Theory of Planned Behaviours. According to the findings of the study, entrepreneurship education that takes place in the traditional classroom environment, delivered by a single instructor and without any events or activities (Type A classes) can bring about change in entrepreneurial intention (EI) by improving entrepreneurial knowledge (EK). However, this increase in EI provided by Type A classes is found to be a short-term effect rather than a sustainable skill base.

The main result of this study is among all dimensions examined in this study, perceived behavioural control (PBC) over one's ability to become an entrepreneur was found to be the most influential. Entrepreneurship education that includes the participation of successful entrepreneurs through events and activities (Type B classes) fails to provide an increase in EI unless it also includes elements which possibility to become entrepreneurs and provide an increase in PBC. EK also leads to an increase in EI only if the participant's PBC has also increased. Neither the first NTOE nor the second NTOE program contributed to an increase in the PBC levels of participants. In fact, PBC values were found to have decreased by the end of the second NTOE program.

The analyses conducted in this study produced results that must be taken into consideration in the design process of type B classes. The increase in PBC is an important factor in determining the increase in EI. This type of entrepreneurship education designed for activities and events with successful figures has the potential to provide a solid and sustainable increase in EI. However, an event without the

attempt to improve PBC may produce negative results for participants. PBC may be infringed when the focus is on developing EI. Success stories may be inspiring, but they may also have the converse effect of over challenging participants; presenting a view of the world that is too far from being attainable or full of overwhelming tasks. Thus, they may end up discouraging participants from engaging in entrepreneurship behaviour.

As a result, entrepreneurship education designed to include activities and events with successful figures have a higher potential for fostering entrepreneurial intention in comparison to entrepreneurship education in the conventional classroom, delivered by a single instructor without any activities or events. No matter its potential, however, it would not produce visible results in this dimension unless its design includes elements that improve the participants' perceived ability to become entrepreneurs and their perceived control over this behavior.

These results run parallel with other findings from studies where entrepreneurship education was examined within the scope of the Theory of Planned Behaviour (Fayolle &

Gailly, 2013; Fayolle et al., 2006; Karimi et al., 2012; Mueller, 2011; Rauch & Hulsink, 2015); providing further evidence for significant correlations between entrepreneurship education, entrepreneurship intention and its subdimensions.

6. DISCUSSION AND SUGGESTIONS

Based on the findings of this study, it is possible to lead a discussion around three elements. First topic of discussion is the motivating effect of the presenting 'unsuccessful entrepreneurship models' in addition to successful ones in entrepreneurship education. Secondly, the cost-benefit balance of organizing entrepreneurship events is discussed. The question here is if these events on entrepreneurship really contribute to the growth of the entrepreneurial ecosystem in return for the effort, time and resources spent to organize them. Finally, attending to the results of this study which illustrate the obvious importance of PBC; the conditions under which these perceptions increase or decrease, and the reasons for the NTOE program's failure to improve PBC values are discussed and suggestions are presented.

In one study where the role of entrepreneurship education in the formation of entrepreneurial intention is investigated (Linan et al., 2011), entrepreneurship education was not found to have a very strong effect. Here the researchers discuss the need for designing a new model of education which focuses on fostering entrepreneurial attitudes and intention; calling for new designs that would ensure more effective education programs. It would nevertheless be useful to emphasize the benefits of the NTOE program. In this regard; universities, corporate organizations, NGO's and important figures from various circles come together and share their knowledge and experience in an attempt to contribute to the growth of the entrepreneurial ecosystem. This collaboration works for the interest of many actors in

the field; in addition to supporting the personal and career development of students with the help of professors and teaching assistants. In order to boost its potential to increase and maintain entrepreneurial intention, as opposed to classroom education without and events or activities, the NTOE program was designed according to the Seven Principles for Good Practice in Undergraduate Education by Chickering and Gamson (1987).

The growth of the entrepreneurial ecosystem should not be taken as the only objective for all these activities, sustainability must rather be the key for growth. In this perspective, the experience of unsuccessful entrepreneurs is as valuable as that of successful ones when it comes to encouraging young people to start their own businesses. Analyzing failure stories would provide rich guidance to next generation entrepreneurs. Moreover, they could extend the scope entrepreneurship education by sharing knowledge and teach by useful examples (Yüceol, 2018).

Research about peer influence on entrepreneurship focuses directly on what triggers entrepreneurship behavior, without making a distinction between successful or unsuccessful entrepreneurs. If the individual is influenced by fellow entrepreneurs, the effect of successful entrepreneurs is more encouraging than that of unsuccessful entrepreneurs. According to Lerner and Malmendier (2011) study, the presence of peers who have entrepreneurship experience tends to keep those students who do not have any past experience of entrepreneurship from certain failures; thus having contact with fellow entrepreneurs does have some positive influence on the success of new entrepreneurs.

Another point of discussion is the assertion that the design of entrepreneurship education must include the participant's perceived ability to become an entrepreneur and having PBC. The findings of this study also support this assertion, that PBC is the most influential factor affecting an individual's entrepreneurial intention. Thus, entrepreneurship education design must definitely include elements to increase PBC if entrepreneurial intention is a desired outcome of the program. In this context, it would be useful to identify situations in which the PBC of participants increase or decrease. A model developed for this purpose suggests that positive attitudes and being supported by one's close circles are factors which lead to an increase in the perceived ability to become entrepreneurs and PBC (Ajzen, 2002; Eagly & Chaiken, 1993; Fishbein, 2007). In sum; as positive attitudes and subjective norm gets higher, together with strong PBC, the intention to demonstrate a behavior also gets higher (Fayolle et al., 2006).

Taking as a basis the abovementioned research findings, the reasons for the failure of the NTOE program can be listed as follows: The perceived ability to become an entrepreneur and PBC are important factors in building and maintaining strong entrepreneurial intention. Any increase obtained in entrepreneurial intention, without the support of strong PBC, is bound to be superficial and temporary. It can, in fact, have a negative impact on the participants. In the light of these correlations, the main reason why the NTOE program was unsuccessful was that student perceptions on becoming

entrepreneurs were not taken into account. This means that the different types of motivation internal and external) that the students have, their level of positive attitudes towards entrepreneurship and their psychological needs were left out; of both design and implementation. Also, all analyses were made only a short period of time after the NTOE program. Therefore, the changes in the level of entrepreneurial intention over time could not be identified.

In this study, suggestions based on the result of research findings and discussions are as follows: Entrepreneurship education can be designed with the help of various models which must include PBC as a variable. Substantial contribution to the literature can be expected from tests and analyses made on the results of new activities derived from these new models. In addition to these structural elements, it is anticipated that if entrepreneurs invited by instructors as role models share cases of failure as well as success stories, these events could make a more positive impact on the entrepreneurial intention of young adults.

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