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# Entrepreneurship in tourism education: a self-efficacy approach

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# Entrepreneurship in tourism education: a self-efficacy approach

## 1. Introduction

The focus of this study is to examine the effectiveness of an intervention targeted at improving student's tourism microentrepreneurship self-efficacy. Central to this study is our postulation that microentrepreneurship is emerging as a key alternative to underemployment in the tourism industry, and that self-efficacy is the construct that best suits the examination of not only student professional readiness and preparedness, but most importantly, their belief in their ability to start and a run a small tourism venture.

## 2. Literature Review

Tourism is a major economic force in both developed and developing nations (Ha & Grunwell, 2011; Hall, Harrison, Weaver, & Wall, 2013; Murphy, 2013). While the ability of tourism to generate employment, public tax, and foreign exchange are undeniable (UNWTO, 2015), concerns are often raised about the seasonality, precariousness, and low pay of most service tourism jobs (Gmelch, 2012). Consequently, local ownership of small tourism businesses is proposed as the most effective way to engage communities in shaping their tourism industry so as to localize benefits and ensure the destination's long term competitiveness and sustainability (Ferreira, Morais, Nazariadli, & Ghahramani, 2017; Nyaupane, Morais, & Dowler, 2006).

While microentrepreneurship is deemed a key tool to favor equitable and sustainable tourism, microentrepreneurs are known to face substantial challenges (Morais, Wallace,

Rodrigues, España, & Wang, 2014), therefore there is a need to explore how microentrepreneurs can be mentored to persevere through these challenges.

Self-efficacy, defined as one's belief in one's ability to succeed in a target behavior, is a dominant theoretical paradigm used to explain people's motivation, effort, and perseverance in a task (Bandura, 1977). Accordingly, Ferreira, Morais, Pollack, and Bunds (2017) adapted it to the context of tourism e-microentrepreneurship, which culminated in Tourism e-Microentrepreneurial Self- Efficacy (TeMSE), a multidimensional construct defined as one's belief in one's ability to successfully perform the various roles and tasks of microentrepreneurship in the tourism e-business sector (Figure 1).

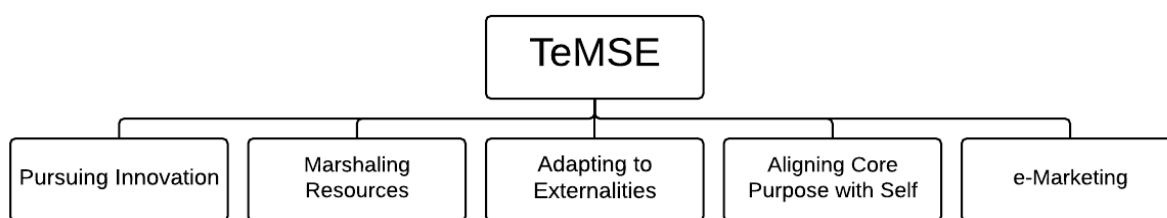


Figure 1. Tourism e-Microentrepreneurial Self-Efficacy

There are four sources of self-efficacy: enactive mastery experiences, modelling or vicarious learning, social persuasion, and physiological factors (Bandura,1982). As a dominant behavior-predicting construct, self-efficacy has been used systematically for program evaluation purposes in a variety of contexts, such as parenting (Bloomfield & Kendall, 2000), science teaching (Palmer, Dixon, & Archer, 2015), physical activity ((Barz et al., 2016), internet (Eastin & LaRose, 2000) and computer proficiency (Murphy, Coover & Owen, 1989). Likewise, the effectiveness of entrepreneurship education programs (EEP) has also been assessed in regard to improvements in entrepreneurial self-efficacy (ESE).

Accordingly, authors believe that it is not sufficient for participants to master entrepreneurship content, it is more important that participants change their entrepreneurial behavior, or that they believe in their capabilities. Accordingly, improvements on ESE accruing from EEPs are reported frequently in the literature (Lucas & Cooper, 2004; Karimi, Biemans, Lans, Chizari, & Mulder, 2016; Karlsson & Moberg, 2013; von Graevenitz, Harhoff, & Weber, 2010).

EEPs are particularly important for underserved groups. Accordingly, studies have consistently shown that females have significantly lower levels of entrepreneurial self-efficacy than males (Baughn, Cao, Le, Lim, & Neupert, 2006; Chowdhury & Endres, 2005). Notwithstanding, Mueller, Conway and Dato-on (2013) posited that the traditional view of “entrepreneur as male” is fading among American business students, but found significant differences between the US and Spain, where gender-role stereotypes are more pronounced.

While tourism programs strive to prepare students for an industry that is increasingly populated by small local businesses, there is a clear lack of scholarship exploring the effectiveness of tourism courses in instilling entrepreneurial capabilities in students. Accordingly, this study uses a two-group pretest-posttest design with an untreated control group to test the following hypotheses:

*Hypothesis 1:* Female students will display significantly lower pre-intervention tourism e-microentrepreneurial self-efficacy in the dimensions (a) innovation (b) adapting to externalities, and (3) e-marketing when compared with male students.

*Hypothesis 2:* Students in the treatment group will experience significantly higher gains in tourism e-microentrepreneurial self-efficacy in the dimensions (a) innovation (b) adapting to externalities, and (3) e-marketing compared with students in the control group.

### **3. Methodology**

The quasi-experimental design of this study consisted of pre- and post-measurements among 71 undergraduate students in tourism management in a 4-year public university in the southeast of the United States, enrolled in two major required courses. Participants completed a survey in the first day of classes (pre-test) and after the semester's intervention in the last day of classes (post-test).

The treatment group was comprised of 41 students enrolled in a tourism management course with a strong entrepreneurial component built into the syllabus, and reinforced by the instructor, himself a part-time tourism entrepreneur and CEO. The control group consisted of 30 students in a facilities management class, in the same department. Both were introductory level (i.e. 200-level) courses required for degree completion, but participation in the study was voluntary and no incentive or extra class credit was given. There were slightly more males in the treatment group 51.2% ( $n = 21$ ), on average, 20.51 years old ( $SD = 1.98$ ). The control group was comparable, with 55.2% males ( $n = 16$ ), and mean age of 20.10 ( $SD = 1.14$ ).

The intervention consisted of the full semester of activities in a tourism management class that included a strong entrepreneurship component. In addition, there were three core assignments that solicited students' hands-on involvement with entrepreneurship content:

### *Oral history interview*

Students were asked to interview a local tourism microentrepreneur in a sector of the tourism industry (i.e. transportation, lodging, food, attractions, planning, and marketing) and create an oral history. The purpose of this assignment was to expose students to other entrepreneurs, enabling them to gain self-efficacy through modeling their behavior and through social persuasion through the entrepreneurs' encouragement for the student to consider their career

### *Consumer Satisfaction*

In this assignment students took on the role of a customer service manager assigned to read and respond to customer reviews on TripAdvisor. In addition, for bad reviews deemed fair and truthful they were also asked to prepare an action item list to address the problem through a change in the procedures in place. The purpose was to provide the students with real life contentious interactions with customers, testing their damage control abilities while keeping true to their idiosyncrasies.

### *Tourism start up pitch video*

Students were asked to create a pitch video for a real tourism tech startup which marketed authentic tourism experiences to socially conscious tourists. They were told the objective of the video was to convince angel investors to finance the startup in exchange for equity. The purpose of this assignment was twofold: first, introduce them to entrepreneurialism and the current social startup process and, second, familiarize them with e-commerce and tourism related web marketplaces, which are increasingly prevalent in the industry.

## 4. Analysis and results

TeMSE was measured using a multidimensional Likert scale developed by Ferreira, Morais, Pollack, & Bunds (2017). For purposes of this study we did not measure dimensions *Aligning Core Purpose with Self* and *Marshaling Resources* because the nature of the items requires that respondents are in fact entrepreneurs. Given that the instrument was developed and validated with a sample of tourism microentrepreneurs (Ferreira, Morais, Pollack, & Bunds, 2017), there were concerns that the meaning of TeMSE could be different to undergraduate students. To ascertain the adequacy of the instrument we conducted factor analysis at baseline for the current sample, which revealed a parsimonious 3-factor underlying structure. Internal consistency reliability for each sub-scale was estimated with Cronbach's alpha coefficients (*e-Marketing*=.93, *Adapting to Externalities*=.76, and *Pursuing Innovation*=.87).

A MANOVA was conducted to examine differences in pre-test TeMSE scores between control and treatment groups in order establish that the sub-samples were equivalent at baseline. Table 1 shows that differences between treatment and control groups are not significant for any of the dependent variables at the .05 level. Hence, we are confident that differences at baseline did not condition the results of the study.

Results revealed that: not only are females' scores not lower than males', but rather they are significantly higher in *e-Marketing*. Hence, we find no support for hypothesis 1 and conclude that undergraduate female tourism students may be, if not more, at least as self-efficacious as their male counterparts in regards to their tourism microentrepreneurial skills.

Dependent Variable pre-test score	df	Df error	F	Sig.	Group	Scores	Std. Deviation	N
Pursuing Innovation	1	62	2.231	.140	Treatment	3.8947	.66939	38
					Control	4.1667	.87706	27
			2.130	.149	Male	3.8750	.85194	32
					Female	4.1364	.66465	33
e-Marketing	1	62	.015	.902	Treatment	4.1360	.63654	38
					Control	4.0926	.91793	27
			6.266	<b>.015</b>	Male	3.8854	.84924	32
					Female	4.3434	.59064	33
Adapting to Externalities	1	62	.462	.499	Treatment	3.3070	.72444	38
					Control	3.1852	.78628	27
			.707	.404	Male	3.3333	.82523	32
					Female	3.1818	.66714	33

Table 1. MANOVA on pre-scores.

To test hypothesis 2, we started by running a paired samples t-test (equal variances assumed) to determine within-subject's differences, or gains, in the treatment group between pre-test and post-test scores. Table 2 shows gains in *Pursuing Innovation* and *Adapting to Externalities*, although only the former is significant at the .05 level. Interestingly, *e-Marketing* shows a slight non-significant decrease.

	Mean Gain	Std. Deviation	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
			Lower	Upper			
Pursuing Innovation	.27	.79	.01	.53	2.09	36	<b>.044</b>
Adapting to Externalities	.12	.75	-.13	.37	.95	36	.349
e-Marketing	-.06	.74	-.31	.19	-.48	36	.635

Table 2. Paired samples t-test

A new MANOVA was conducted, this time using gain in TeMSE scores in each dimension as dependent variables and membership in the control/treatment group as factors,



to establish that the observed gain in *Pursuing Innovation* in the treatment group was indeed caused by exposure to the program.

Results on Table 3 show that the treatment group had a mean gain of .27, which was significantly higher than that observed in the control group, which supports our assumption that exposure to the program produces gains in TeMSE.

Dependent Variable (gain)	df	Df error	F	Sig.	Group	Means	Std. Deviation	N
Pursuing Innovation	1	62	4.069	<b>.048</b>	Treatment	.2703	.78700	37
					Control	-.0926	.58895	27
e-Marketing	1	62	.238	.627	Treatment	-.0586	.74351	37
					Control	.0309	.69497	27
Adapting to Externalities	1	62	1.099	.299	Treatment	.1171	.75038	37
					Control	.3333	.89634	27

Table 3. MANOVA on gain scores

In sum, hypothesis 2 is partially supported, meaning that only one out of three TeMSE dimensions attained statistically significant gain during the length of the program.

## 5. Discussion

The purpose of this study was two-fold: first we wanted to test the assumption that females have lower levels of ESE and; second test the effectiveness of EEP in elevating TeMSE. Regarding the first, we found no evidence of such handicap among female tourism management students, which is consistent with recent literature in ESE suggesting that such gap is diminishing drastically in the US, and that it is only present in countries where stereotyped gender roles are prominent (Mueller, Conway, & Dato-on, 2013). Notably, results suggest that female tourism management students are more self-efficacious in *e-Marketing*. Similar results were found by Curtis et al. (2010) in a study on the adoption of social media

for public relations by nonprofit organizations, in which females scored significantly higher in the performance expectancy factor. Hence, it is plausible that e-commerce may be emerging as a platform for traditionally underserved groups to overcome extant hegemonies and gradually earn their position in the economy. For the second hypothesis, paired t-tests and multivariate analysis of variance revealed a significant mean self-efficacy gain in the treatment group in regards only to *Pursuing Innovation*. Nevertheless, it should be stressed that innovation is at the center of the entrepreneurship process, whether micro or macro, general or specific as in the tourism sector (Aulet, 2013; Ries, 2011).

The characteristics of the sample may explain, at least in part, the mixed results obtained: while the extant literature on ESE deals with data from nascent entrepreneurs, business undergrads or MBA students, it is very unlikely that tourism management students in their 20's had ever seriously considered becoming tourism microentrepreneurs, or for that matter reflected on what such endeavor would entail. Thus, we argue that the modest and negative gains in *Adapting to Externalities* and *e-Marketing*, respectively, may reflect not the limitations of the intervention, but rather a process of conscientization (Freire, 1970) of the oppressive and monopolistic practices of the corporate tourism industry that allow them to control supply and demand, relegating locals to the "sidelines of the tourism economy, informally or even illegally gleaning bits of income not worthwhile to the formal industry" (Ferreira, Morais, Nazariadli, & Ghahramani, 2017, p.70). Moreover, we would advise tourism programs to break out of the mold of training entry-level staff for large tourism companies that know best how to deal with the challenges of a sensitive industry, and actively familiarize their students with public organizations like TDAs and private businesses like insurance companies devoted to helping small businesses cope with risk.

In addition, enactive mastery is the source of self-efficacy with the largest and longest-lasting effect on behavioral change (Bandura, 1982). And, even though a great deal of effort was put in the development of the curriculum to instill an entrepreneurial mindset, arguing that the program provided vast hands-on entrepreneurial experiences is an untenable thesis. In order to enable participants to experience mastery in EEPs, Co and Cooper (2014) recommend that students are grouped in small teams and allocated to work with a venture, acting as consultants tasked to identify a problem or issue facing the enterprise. Such vision is perhaps too ambitious for an introductory survey class in tourism, but it would be interesting to explore potential collaborations between tourism management programs and the Entrepreneurship Clinics, usually run by business schools, which are loci of interaction between universities and local startups, and where tourism students might work directly with entrepreneurs.

Despite the lack of built-in mastery opportunities, we were confident that students would be able to learn a great deal vicariously, by modelling the instructor's behavior, himself a tourism entrepreneur and a CEO. Also, the oral history assignment gave ample opportunities to engage with other entrepreneurs during fieldwork. However, in face of the study results, we now interpret that neither the instructor nor assigned entrepreneurs, looked or felt sufficiently like the students themselves, a condition necessary for vicarious learning to be effective (Bandura, 1982). In this matter, Co & Cooper (2014) suggested including frequent presentations from guest speakers representing a wide variety of enterprises to enable students to learn from their experiences in starting and running their own social enterprises. We would add that bringing in recent PRTM graduates who are successful entrepreneurs, regardless of the metric, could provide evidence that students have what it

takes to succeed in entrepreneurship. This, we propose, would require that programs court not only alumni with successful careers in large tourism corporations, but also alumni and partners that have become small entrepreneurs and microentrepreneurs and that may lead a career consistent with their lifestyles and with positive impact for their local communities.

For future research, we suggest that, in addition, follow-up in-depth interviews should be undertaken with a subsample of participants in the treatment group that could provide some insight to the interpretation of the results. This is especially important in future studies that examine TeMSE, because caution is advised when drawing on ESE literature to interpret results of TeMSE, due to the specificity of the self-efficacy (Bandura, 2006).

## **6. Conclusion**

This study was pioneer in the application of TeMSE to the higher education context. A quasi-experiment was conducted with PRTM students and results show that females scored higher in *e-Marketing*, and were on par in *Adapting to Externalities* and *Pursuing Innovation*. Moreover, in the treatment group, significant gains were found in *Pursuing Innovation*, whereas gains in *Adapting to Externalities* were non-significant, and *e-Marketing* denoted a negative gain. While the results fall somewhat short of expectations, the fact that significant gains were found in *Pursuing Innovation*, a very central dimension to the entrepreneurial process, is rather encouraging and noteworthy.

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