

Testing a Causal Model for the Development of Entrepreneurial Intention in Singapore

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Principal Topic

This paper uses comparative research to test and extend formal models representing an emerging theory of entrepreneurial intention. There is a strong line of research in the vocational literature suggesting that understanding why some individuals pursue certain careers is best studied by comprehending how career intent is formed. Ajzen (1991) views intent as a net expression of the motivational factors influencing behavior and argues that external influences affect intentions through an individual's perception of what is both desirable and feasible; he asserts that the primary motivator for career choice is intent.

Entrepreneurial studies follow this emphasis on the central role of intention in career research. Krueger and Carsrud (1993) suggest that becoming self-employed is best predicted by intention. Shapero and Sokol (1982) argue that in order for a life path change to lead to what they term an "entrepreneurial event" there must first be a push or pull toward a new challenge; they focus on whether the individual sees entrepreneurship as desirable, for example, as a means to seek acceptance in the eyes of their culture, family and peers; and as feasible, examining the possibility of venture creation with regard to strain on their personal relationships, financial considerations, and the demonstration effect. Kolvereid (1996, 48) sums this view by suggesting that, "intentions are immediate antecedents of actual behavior," and others continue this focus on desirability and feasibility

Methodology/Key Propositions

There is an appealing elegance to a model that desirability and feasibility together determine intention, and this enables a literature pursuing a formal model of intention. Of this work, some of the more influential writings include Shapero's SEE theory of the "entrepreneurial event" and Ajzen's theory of planned behavior (TPB). These two approaches can be seen as having some interesting areas of agreement. Shapero's "perceived feasibility" is arguably "perceived behavioral control" in Ajzen's TPB, and both may be also described as as perceived self-efficacy. TPB's subjective norms and attitudes are similar to SEE's perceived desirability. Krueger et al (2000) build on this earlier work to posit a modified model, the Shapero-Krueger model, where prior expected outcomes lead to intervening perceived desirability, prior perceived self-efficacy leads to intervening perceived feasibility and both predictors join with propensity to act to create intent. This paper explores the fit of the Shapero-Krueger model further by testing its elements and causal structure using data gathered in Singapore. Through the cooperation of administrators and instructors at six junior colleges and polytechnics, 440 Singaporean students completed a 10-12 minute paper questionnaire in April and May 2005. Two thirds (64.1%) of the participants were polytechnic students at Ngee Ann Polytechnic, Singapore Polytechnic or Temasek Polytechnic. The remaining 35.9% attended Yishun, Victoria or Jurong Junior Colleges. Most students, 90.2%, were in their first year, with a mean age of 17. The top two courses of study represented were Management and Business with 31.1% of respondents and, at 27.5%, Math and Sciences. Slightly more women, 56.6%, than men, 43.4%, are represented. This population was largely of Singaporean descent; in addition to the just over 90% of the survey respondents born in Singapore themselves, 78.9% of the surveyed student's mothers and 80.7% of their fathers were also born in Singapore.

Along with this background information, the survey also contained a modified version of Bateman and Crant's (1993) pro-activity scale, a venturing self-efficacy scale based on Bandura's work (1997) as introduced in Cooper and Lucas (2004), an entrepreneurial intent scale, a measure of the desirability of entrepreneurial

careers as assessed by the appeal of various types of employment, and, Tafarodi and Swann's (2000) revised self-competence/self-liking (SLCS-R) scale as based on Rosenberg's (1965) self-esteem scale.

Using structural equation modeling (Kline 2005), the data from Singapore is first analyzed for a cross-cultural test of the Shapero-Krueger model (Krueger et. al. 2000), comparing results from Singapore with their model developed using a sample of 97 senior business students at Boise State University in Idaho. Structural equation modeling is a method of choice because of its particular strength for making causal inferences about the relationships among the variables being studied

Results and Implications

This paper's major finding is a substantiation of the Shapero-Krueger model (Krueger et. al. 2000) of individual entrepreneurial development in a Singaporean context. This provides evidence to support a cross-cultural theory of entrepreneurial intention that includes a causal ordering of desirability, feasibility and entrepreneurial intention as in the figure below. Importantly, the self-liking component of self-esteem plays no positive role in the model, but the desire to be seen as innovative does.

The model also serves to cast some light on the largely unsuccessful pursuit of personality traits as a predictor of entrepreneurship. It is found that a component of self-esteem is at best only weakly correlated with entrepreneurial intention, but that it is a major factor of the development of entrepreneurial self-efficacy. The suggestion is that the personality trait of self-esteem does have an indirect influence on intention through its effect on the determinants of intent early in individual development, but that it is only the more proximate and domain specific form of self-efficacy that directly supports development of entrepreneurial intention.

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