



2-4-2016

# Does Experience in a Business Incubator Increase Student Entrepreneurial Intentions?

Laurel F. Ofstein

Western Michigan University, laurel.ofstein@wmich.edu

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## WMU ScholarWorks Citation

Ofstein, Laurel F, "Does Experience in a Business Incubator Increase Student Entrepreneurial Intentions?" (2016). *Spring Convocation*. Paper 4.

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# Does Experience in a Business Incubator Increase Student Entrepreneurial Intentions?



**Laurel F. Ofstein, PhD**

Assistant Professor of Management

**Co-Authors:**

*Sophie C. Bacq, Northeastern University*

*Jill R. Kickul, New York University*

*Lisa K. Gundry, DePaul University*

# Why does an individual choose to engage in entrepreneurship?



# Why does an individual choose to engage in entrepreneurship?



- Premise: entrepreneurship is a deliberate career choice and, as such, is cognitive in nature
- Social cognition literature: career choice is best predicted by intentions (Lent, Brown, & Hackett, 1994)
- An entrepreneurship career is best predicted by an entrepreneur's intentions to set up a new venture instead of joining an existing one (Davidsson, 1991; Katz, 1992; Krueger, Reilly, & Carsrud, 2000)

Entrepreneurial intentions  
+ their antecedents

*Individual*

*Environmental*

# What is a business incubator?



- An company that provides services such as training or office space to new startup companies
- Focused on startup and early stage companies
- An incubator may provide services such as:
  - Help with business basics
  - Networking
  - Marketing
  - Presentation skills
  - Links to strategic partners
- Businesses must apply for admission
- Accelerators (such as Starting Gate here at WMU) compress the incubator timeline into a “boot camp” style process

# Entrepreneurial Intentions Antecedents



- Individual Predictors

- Entrepreneurial self-efficacy is one of strongest predictors of entrepreneurial intentions

(Chen, Greene, & Crick, 1998; De Noble, Jung, & Ehrlich, 1999; Jung, Ehrlich, De Noble, & Baik, 2001; Krueger et al., 2000; Scott & Twomey, 1988)

- Environmental Predictors

- Academic experience, # ventures started prior to and during university programs, and alumni new business creation

(Bae, Qian, Miao, & Fiet, 2014; Charney & Libecap, 2000; Peterman & Kennedy, 2003; Sanchez, 2013)

- Prior industry and venture experience

(Fiet, 1995; Gimeno, Folta, Cooper, & Woo, 1997; Robinson & Sexton, 1994; Rotefoss & Kolvereid, 2005)

- Mentoring systems and student incubators in universities

(Jang, 2013; Pruett, Powell, & Toney, 2008)

- Possible interaction not empirically tested to date

(Tang & Tang, 2007)

# Role of “Entrepreneurial Munificence”



- Positive role of “entrepreneurial munificence”
  - *The scarcity or abundance of critical resources needed by aspiring entrepreneurs to operate within an environment* (Tang, 2008)
  - Robust infrastructure, easily accessible skills and role models, access to financial support and government incentives (Dubini, 1988; Gnyawali & Fogel, 1994; Korunka et al., 2003; Tang & Tang, 2007)
- Business incubators have been found to have favorable outcomes for the surrounding area in terms of:
  - Recruiting & retaining entrepreneurial businesses
  - Job creation
  - Supporting the creation of fiscal revenues (Eshun, 2004)



# Research Objective



- Incubators provide opportunities to develop mentoring relationships and networks, entrepreneurship knowledge and skills, and to observe launch and growth practices (Zhao, Seibert, & Hills, 2005)
  - Yet, the effects of the presence of an incubator on the rate of start-up creation in a given environment have not been examined
- **To empirically examine the extent to which entrepreneurial munificence (experience in an incubator setting) indirectly increases an individual's intentions to become an entrepreneur**

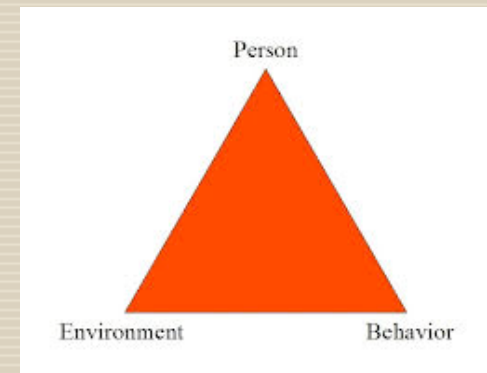


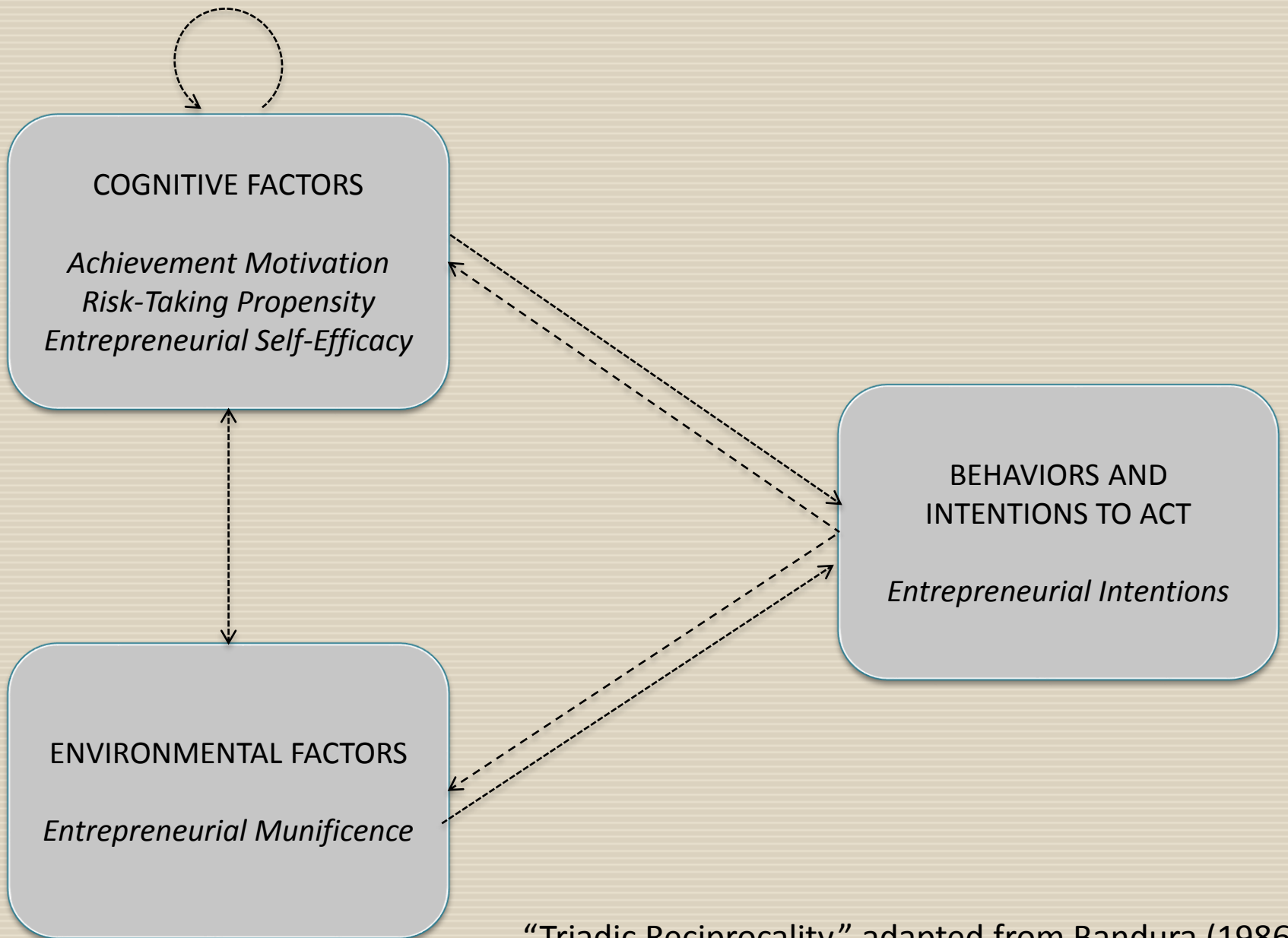


# Social Cognitive Theory (SCT)

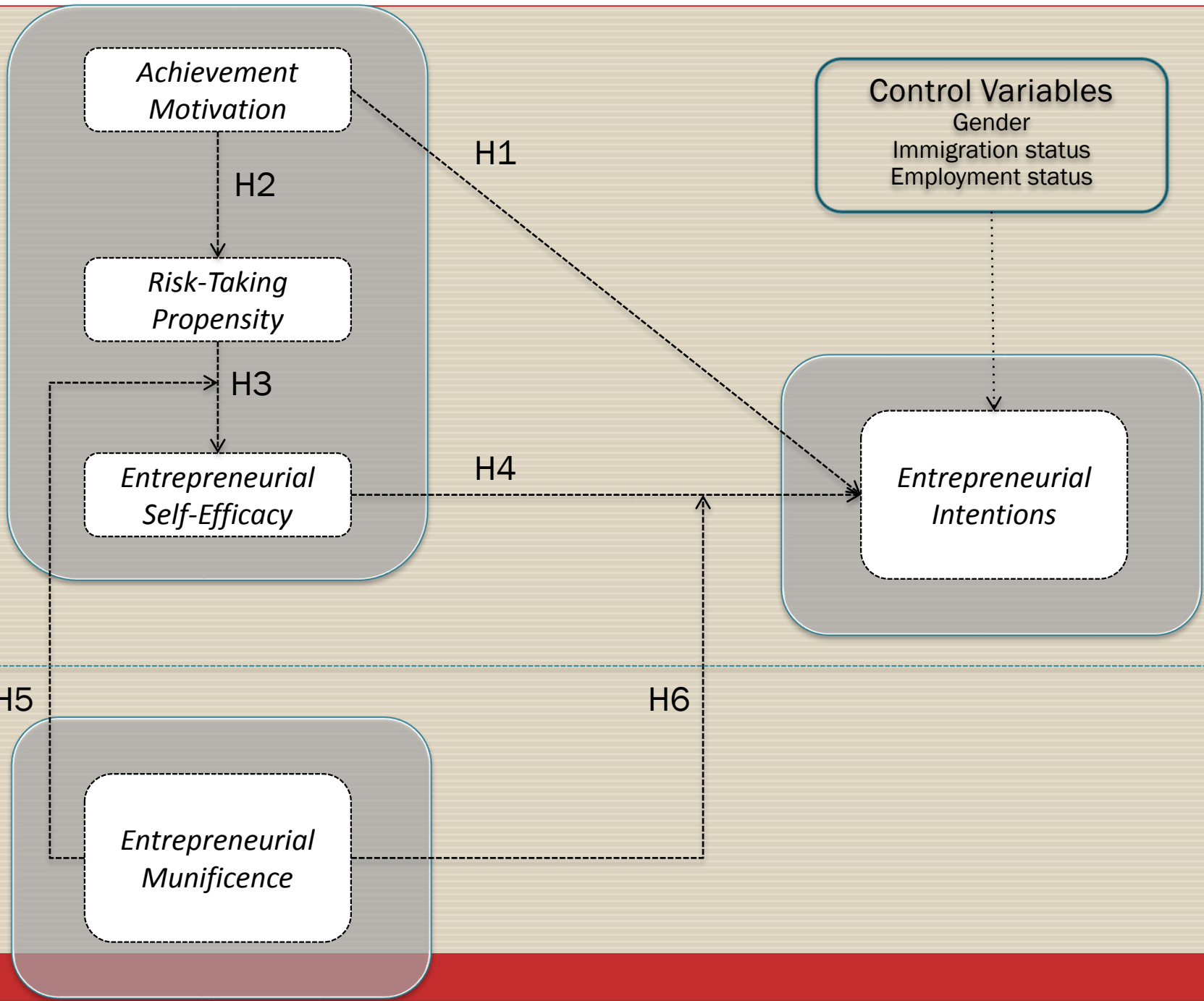


- SCT blends cognitive, behavioral and environmental perspectives (Hmieleski & Baron, 2009)
- SCT provides a useful framework to study the mechanisms through which cognitive and environmental factors interact to explain entrepreneurial intentions
- “Triadic reciprocity” (Bandura, 1986)  
Human actions (or intentions to act) are influenced by the interaction between both cognitive factors and environmental events





“Triadic Reciprocity,” adapted from Bandura (1986)



# Cognitive factors → Entrepreneurial intentions



- Hypothesis 1: Achievement motivation positively relates to entrepreneurial intentions.
- Hypothesis 2: Achievement motivation positively relates to risk-taking propensity.
- Hypothesis 3: Risk-taking propensity positively relates to entrepreneurial self-efficacy.
- Hypothesis 4: Entrepreneurial self-efficacy positively relates to entrepreneurial intentions.

# Entrepreneurial Munificence as a Moderator



- Hypothesis 5: Entrepreneurial munificence strengthens the effect of risk-taking propensity on entrepreneurial self-efficacy.
  - ✦ *When given the opportunity to work alongside entrepreneurs within an incubator setting, individuals may more acutely learn and develop entrepreneurial skills and capabilities central to the start-up process*
  
- Hypothesis 6: Entrepreneurial munificence strengthens the effect of entrepreneurial self-efficacy on entrepreneurial intentions.
  - ✦ *Incubators provide prospective entrepreneurs social capital (mentoring relationships) to assist them in deploying their capabilities as they consider launching their own entrepreneurial venture*
  - ✦ *The acquisition of entrepreneurship knowledge and skills, as well as the social support, intensifies the entrepreneurial self-efficacy—entrepreneurial intentions relationship*

# Method – Data



- Sample

- Unique entrepreneurially munificent environment: *New York City Accelerator for a Clean and Resilient Economy (NYC ACRE)*
- 106 MBA students, 34 worked in the incubator for 5+ months
  - ✦ 43% male, 57% female
  - ✦ Average age of 24.90
  - ✦ 35% currently employed

- Data Analysis

- Multiple hierarchical regression
- Tested for common method bias



# Results



H#	Tested Effect	Hyp. Sign	Results
H1	Achievement Motivation → Entr. Intentions	+	✓ $\beta = .25, p < .01$
H2	Achievement Motivation → Risk-Taking Prop.	+	✓ $\beta = .40, p < .001$
H3	Risk-Taking Prop. → Entr. Self-Efficacy	+	✗ $\beta = .14, p = n.s.$
H4	Entr. Self-Efficacy → Entr. Intentions	+	✓ $\beta = .18, p = .069$
H5	Entr. Munificence * Risk-Taking Prop. → Entr. Self-Efficacy	+	✓ $\beta = .89, p < .001$
H6	Entr. Munificence * Entr. Self-Efficacy → Entr. Intentions	+	✓ $\beta = 1.94, p < .01$

# Contributions to Research



1. Extend SCT to the study of entrepreneurial intentions by looking at the triadic reciprocity of cognitive factors (achievement motivation, risk-taking propensity and entrepreneurial self-efficacy), the environment, and individual intentions to engage in entrepreneurship
2. Introduce and empirically demonstrate the moderating effect of *entrepreneurial munificence* on the entrepreneurial self-efficacy—entrepreneurial intentions relationship



# Future Research Opportunities



- Lagged measure of decision to engage in entrepreneurship
- Rise in # of incubators, accelerators, and collaborative spaces in which entrepreneurs and newly launched enterprises congregate in cities and across regions (Lopez, 2013)
  - New research opportunities for entrepreneurial munificence
  - Develop the dimensions of entrepreneurial munificence
- Extend our logic to entrepreneurially munificent environments beyond an incubator setting
  - Replicate our study to full-time/part-time employees
  - Replicate our study within organizations (corporate entrepreneurship)

# THANK YOU!



Contact information: [laurel.ofstein@wmich.edu](mailto:laurel.ofstein@wmich.edu)

