



Legitimacy and New Firm Founding: The Role of Innovation and Kinship Ties on Start-up Activities Among U.S Nascent Entrepreneurs

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Agenda

- **Introduction**
- **Theoretical Underpinnings**
- **Hypothesis**
- **Methods**
- **Results**
- **Conclusions & Implications**
- **Acknowledgements**
- **Questions**

Introduction

- **Quick Bio**
 - **Doctoral Student in Management**
 - **Research interest - Nascent Entrepreneurship**
 - **New Firm Founding**
 - » **PSEDII Criteria**
- **Motivation for this project**
 - **Aldrich, Howard. & Ruef, Martin. (2006) *Organizations evolving*. Sage Publications, inc.,; Thousand Oaks, CA.**
 - **Weick, Karl. (2005) *Sensemaking in Organizations*. Sage Publications, inc., Thousand Oaks, CA.**

Introduction

RESEARCH QUESTIONS:

- *What activities are most influential in new firm founding?*
 - What founders actually do that is most influential in affecting new firm emergence during the gestation period (Aldrich, 1999; Katz & Gartner, 1988, Shane & Delmar, 2002; Reynolds & Curtin, 2008).
- *What influences how individuals go about deciding what activities to pursue?*
 - Individual behaviors are the principal necessary ingredients for organization formation to occur (Gartner & Carter, 2005).
 - Individuals make sense of the start-up process differently.
- **Juxtaposing Institutional Theory and Sensemaking Perspective**

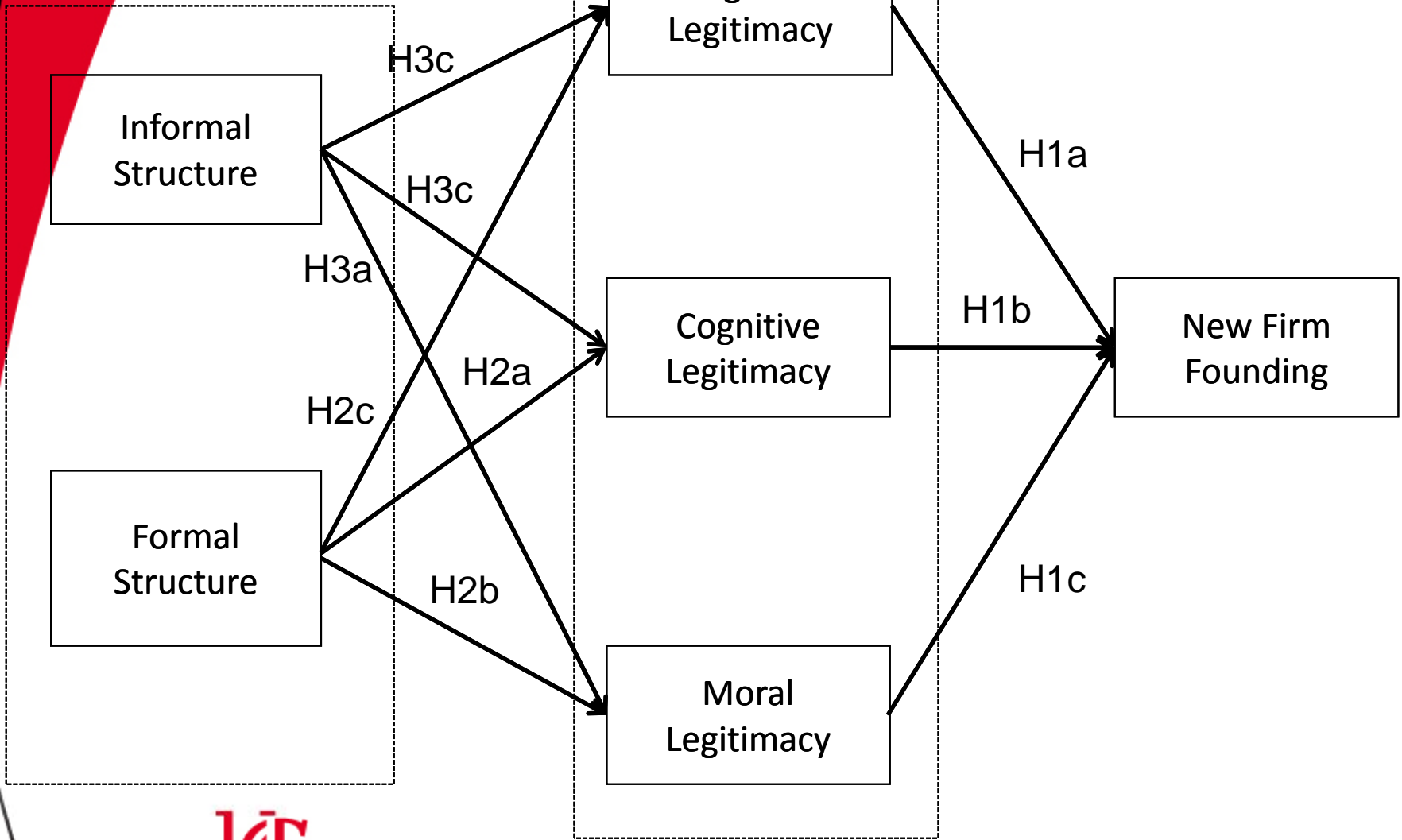
Theoretical Underpinnings

- **What hasn't been fully considered in regards to start-up behaviors?**
 - **Institutional Theory**
 - **Structures: rules and resources that constrain and enable human action**
 - "...sets of rules and resources that individual actors draw upon in the practices that reproduce social systems" (Boone, 2005).
 - **Structures expressed in actions (structures are like rules of conduct) (Giddens, 1984).**
 - **Structures can be:**
 - Formal
 - Informal
 - **Sensemaking**
 - structures create a frame for individual sensemaking that affects behavior
 - emergent organization is an ongoing process of sensemaking interactions among individuals, and action is the embodiment of the sensemaking process (Weick, 1979)

Theoretical Underpinnings

- **What has not been fully explored in regards to new firm founding?**
 - **What “kind” of activities are most influential**
 - **Institutional Theory**
 - **Entrepreneurs engage in various start-up activities to signal legitimacy.**
 - » *Legitimacy* is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995).
 - **Pragmatic, Moral and Cognitive Legitimacy**
 - **Sensemaking is conveyed through action.**
 - **Start-up activities are a function of individual interpretations that manage institutional forces and confer legitimacy**

Frame for Sensemaking



Methods

- In order to investigate these relationships we will utilize the Panel Study of Entrepreneurial Dynamics II (PSED II).
- The PSEDII is a detailed longitudinal survey with information on a cohort 1,214 individuals that were identified while they were in the process of starting new businesses.
 - <http://www.psed.isr.umich.edu/psed/home>
- Examining individuals *actively involved in the process* of organizing a new firm, the PSED II addresses the inherent selection bias limitation prevalent in entrepreneurial research.
 - (N=972)

<i>Construct</i>	<i>Variable Operationalization</i>	<i>PSED II Items</i>	<i>total number of items</i>	<i>Cronbach Alpha</i>	<i>Description</i>	<i>Measurement Level</i>
Pragmatic Legitimacy	Business Presence Activities	AC1; AE11; AG8A_1; AE18; AC5; AE20; AE5; AE22	8	0.71	Legal form registered; Opened bank account for business; Nascent entrepreneurs signed an equity agreement; Hire accountant; Liability insurance bought; Hired lawyer; Supplier credit established; Joined trade association.	Ratio
Pragmatic Legitimacy	Product Implementation Activities	AE13; AD9; AD20; AD6; AE24; AD18; A16	8	0.76	First income received; Promotion for product or service initiated; Began talking to customers; Got internet or phone listing; Model or prototype initiated; First use of physical space; Purchase material, supply and/or inventory; Purchased or leased capital assets	Ratio
Pragmatic Legitimacy	Resources Activities	AE15; AE7	2	0.41	First monthly positive cash flow; First person hired	Ratio
Pragmatic Legitimacy	Business Registration Activities	AE30; AE32; AE34; AE36; AE26; AE28	6	0.62	First state unemployment insurance filed, First federal FICA payment; First federal income tax initiated, Known listing in D&B; Filed for federal EIN; Filed for fictions name (DBA)	Ratio
Cognitive Legitimacy	Business Planning Activities	AD24; AD22; AD1; AD20; AD28	5	0.66	Defining markets initiated; Began collecting competitor information; Business plan initiated; Financial projections initiated; Determined regulatory requirements	Ratio
Cognitive Legitimacy	Intellectual Property Rights Activities	AD11; AD13	2	0.42	Patent, trade copy initiated; Proprietary technology fully initiated	Ratio
Moral Legitimacy	Financing Activities	AE1; AE3	2	0.88	Asked for first funding; Got first funding	Ratio
Moral Legitimacy	Sweat Equity Activities	AR1; AH18_1	2	0.26	Invested money in start-up; Devoting full-time to start-up	Ratio
Informal Structure	Nascent Team Composition	AH8_2; AH8_3; AH8_4; AH8_5; AJ2_23; AJ2_24; AJ2_25; AJ2_34; AJ2_35; AJ2_45;	n/a	n/a	combinations of kinship ties among owner and non-owner helpers demographics from responses provided to identified items. Responses included were: Spouses; Partners sharing a household;	Ordinal
Formal Structure	Business High Tech Index	AS4; AS5; AS6	3	0.48	whether the product or service was not available five years prior, whether R&D spending is a major priority, and finally whether the founders consider this start-up high tech or not.	Ordinal

Sample Descriptives

- **20 months from conception and on average has two team members.**
- **56% of the cases are considered reproducer firms, while 44% of the cases are considered innovator firms.**
- **Among nascent entrepreneurs completing start-up activities at least 50% of total possible actions have been completed in**
 - **sweat equity activities, product implementation, and business planning**
- **63% of the cases are continuing their start-up efforts, while 13% of cases reached new firm status, and 23% of cases quit the start-up process.**
- **Sole proprietors, represent about 54% of the cases; spousal pairs at 23%; non-family teams representing 15% of the cases; family teams represent 8% of the cases**

Hypothesis 1

- **H1: Three of four pragmatic legitimizing activities significantly differentiate new firms from active start-ups.**
 - business presence activities ($p=.030$).
 - Product implementation ($p=.004$)
 - resource activities ($p<.0001$)
- **H1: Two of four pragmatic legitimizing activities significantly differentiate new firms from active start-ups.**
 - business presence activities ($p<.0005$)
 - product implementation activities ($p=.025$)

Hypothesis 2

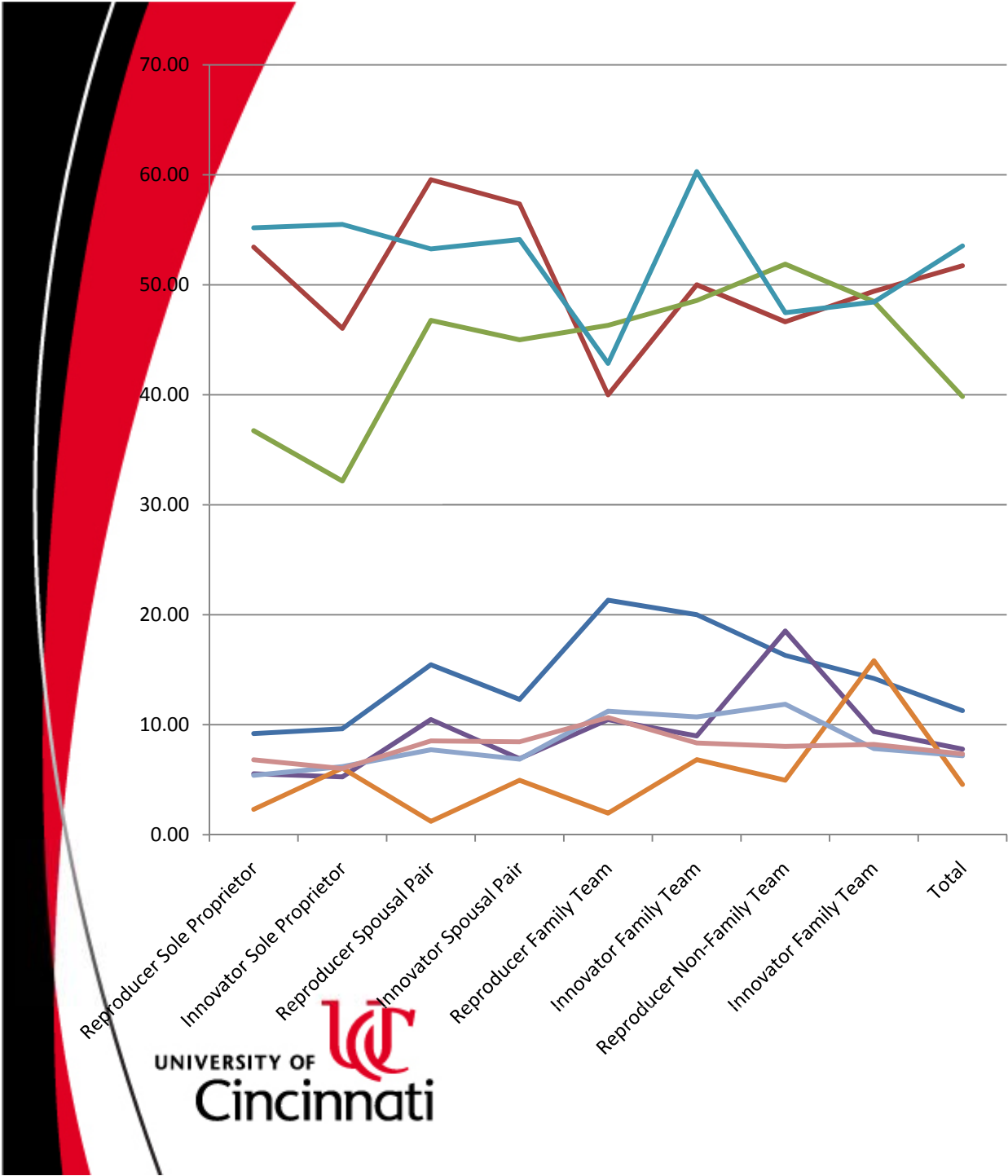
- **Are innovator firms more likely to complete one of the two forms of start-up activities associated with cognitive legitimacy than reproducer firms.**
- **Innovator firms and reproducer firms engage at similar levels among classes of activities, except for intellectual property right activities.**
 - **($t = -5.20$; $d.f. = 629.27$; $p < .0005$)**
- **Innovators firms are 3.5 times more likely to engage in intellectual property right activities than reproducer firms.**

Hypothesis 3

- **Pragmatic Legitimizing Activities:**
 - business presence activities $\chi^2(3, 972) = 23.56, p < .0005;$
 $\eta^2=.02$
 - product implementation activities $\chi^2(3, 972) = 11.73, p = .008;$
 $\eta^2=.01$
- **Cognitive Legitimizing Activities**
 - business planning activities $\chi^2(3, 972) = 20.61, p < .0005;$
 $\eta^2=.02$
 - intellectual property right activities $\chi^2(3, 972) = 15.94, p = .001;$
 $\eta^2=.02$
- **Moral Legitimizing Activities**
 - Financing Actives $\chi^2(3, 972) = 19.00, p < .0005;$ $\eta^2=.02;$
 - resource activities $\chi^2(3, 972) = 14.90, p = .002;$ $\eta^2=.02$

Hypothesis 3

- **Follow up tests**
 - Spousal pair team were more likely to complete a higher percentage of business presence activities ($p = .024$), product implementation activities ($p = .046$), and business planning activities ($p = .012$) than sole proprietors
 - Family teams were more likely to complete more business presence activities ($p = .010$) than sole proprietors
 - Spousal pairs were more likely to complete a higher degree of product implementation activities ($p = .035$).
 - Non-family teams were more likely to complete a higher degree of business planning activities ($p = .047$).
- **Between family and non-family teams a no significant differences were found .**



Grouped Median

- BUSINESS PRESENCE
- PRODUCTION IMPLEMENTATION
- BUSINESS PLANNING
- FINANCING
- SWEAT EQUITY
- INTELL PROPERTY
- RESOURCES
- BUSINESS REGISTRATION



Conclusions/Implications

- **The data provides “some” evidence that the context for sensemaking, and subsequently action, is shaped by formal and informal structures**
- **This assessment found that there are differences in the likelihood of new firm founding between kinds of start-up activities engaged in.**
 - **Business registration, product implementation, and resource activities distinguish new firms from quits and continuing start-up efforts.**
- **There is preliminary evidence that team structure influences class of start-up activity engagement, but, subsequent analysis of follow-up wave data is need to better comprehend such differences.**
- **The data provides evidence that different formal and informal structures and influence the context of start-up actions aimed at garnering legitimacy.**

Limitations

- **Looking only at first follow up of PSEDII**
- **Instrumentation**
 - Low reliabilities in some instances for activity classes
 - However, construct was based off pooled EFA for PSEDI & PSEDII
- **Constrain gestation windows among sample in various intervals to further explore variations in activities by structural factors**





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**Thank you for your attention
&
Questions?**