

THE OPPORTUNITY NOT TAKEN: INSTITUTIONAL AND COGNITIVE BARRIERS TO
ENTREPRENEURIAL INNOVATION IN CONTEXTS OF RESOURCE SCARCITY

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ABSTRACT

Entrepreneurship is increasingly heralded as a solution to poverty, and many organizations and governments have begun to pursue market-based approaches to poverty alleviation through programs like microfinance and entrepreneurship training. Despite some exceptions, the results of such efforts have largely generated imitative opportunities, whereby individuals use the money and training they receive to replicate existing businesses within their community, rather than becoming able to recognize a broader range of opportunities for innovation and growth, and would-be entrepreneurs are often little better off than before. Whereas prior work has predominantly explored human/financial capital and formal institutional barriers to innovative entrepreneurship, this dissertation, through a series of three studies, using multiple theoretical lenses and methodologies, aims to identify and understand other potential impediments to innovative entrepreneurship in contexts of poverty, focusing on informal institutional and cognitive barriers. My studies all aim to provide both theoretical and practical insights around the following broad research question: What are the (informal) institutional and cognitive barriers to entrepreneurial innovation in contexts of resource scarcity, and how might they be addressed?

DEDICATION

This dissertation is dedicated to my husband Jesse, who has pushed me to follow my dreams and then tirelessly picked up the slack as I pursued them, my kids June and Niko, who are my anchors, continually reminding me of what's important, and have been patient beyond their years with my absences, and my mom and dad, who love me unconditionally and have made so many sacrifices in the name of my education.

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INTRODUCTION

RESEARCH TOPIC

Despite three decades of development interventions by international aid agencies and governments, over a third of the world's population remains in poverty (Alvarez and Barney, 2013; Bruton, Ketchen, & Ireland, 2013). Entrepreneurship has been heralded as an important vehicle to break the cycle of poverty, and significant development effort is now directed toward fostering entrepreneurship (Hall, Matos, Sheehan, & Silvestre, 2012) and other forms of market participation (Mair, Marti & Ventresca, 2012). Despite some exceptions, the results of such efforts have largely generated imitative opportunities, whereby individuals use the money and training they receive to replicate existing businesses within their community (Alvarez & Barney, 2013; Bradley, McMullen, Artz, & Simiyu, 2012). By entrepreneurship I refer to the spectrum of both imitative and innovative forms of entrepreneurial activities, and acknowledge that both have an important role to play in economic development. Nonetheless, while imitating existing businesses may provide short-term financial benefit to a new entrant, increased supply of the same product or service without a corresponding increase in demand will typically decrease profitability in the long run (Baumol, 1993; North, 1990; Schumpeter, 1934). Therefore, to achieve sustainable economic growth, it is important for some entrepreneurs to pursue more innovative types of opportunities (North, 1990; Schumpeter, 1934). Such opportunities involve creating new means/ends relationships as opposed to simply using the same set of activities to generate the same products and services as those provided by existing actors (Baumol, 1993; Minniti & Levesque, 2010).

Within the category of innovative entrepreneurship, distinctions are made between novel (new to the firm and industry) and incremental innovations (new to the firm but not the industry)

(Robson et al., 2009), or differentiation-related (how entrepreneurs position their products relative to the competition in an existing market) and novelty-related (entrepreneurs that identify and fill new sources of demand or supply) entrepreneurship (Bradley et al., 2012). In this dissertation, innovative entrepreneurship encompasses each of these definitions. For example, an entrepreneur introducing a product that is new to her community (new product); an entrepreneur taking an existing service, such as a barber shop, and introducing a new element, such as cell phone charging while you wait (new service); an entrepreneur introducing the rental, rather than sale, of a farm tool to customers (new business model); an entrepreneur finding a more efficient way of pounding fufu, an African cassava-based dish (new process), and an entrepreneur significantly scaling up her operations to service new customers (new market) would all be considered innovations.

Many factors have been shown to influence impoverished individuals' decision to pursue entrepreneurial opportunities. Prior research has focused primarily on either a lack of human and financial capital or a lack of formal market institutions as barriers to innovative entrepreneurship in contexts of poverty. From an economic institutional perspective, researchers have posited that a lack of property rights and contractual enforcement diminishes the willingness of individuals to invest in developing novel products and services (De Soto, 2000; North, 1990). From a human and financial capital perspective, scholars have argued that the types of training conducted fails to include the necessary creativity components, and the types of financial capital offered are not sufficiently risk oriented to spur experimentation (Bradley et al., 2012).

NGOs and governments have also disproportionately focused on these factors to attempt to alleviate poverty, launching programs focused on both human capital (such as entrepreneurship, technical, literacy and numeracy training), and financial capital (such as

microfinance, village savings and loan groups, credit unions, and the provision of income-generating assets) (Korten, 1987). Despite well-meaning efforts, results often remain below expectations, suggesting that other factors may inhibit innovative entrepreneurial activity. My dissertation, through a series of three studies, using multiple theoretical lenses and methodologies, aims to identify and understand other potential impediments to innovative entrepreneurship in contexts of poverty, including institutional and cognitive barriers. My three studies all aim to provide both theoretical and practical insights around the following broad research question: What are the (informal) institutional and cognitive barriers to entrepreneurial innovation in contexts of resource scarcity, and how might they be addressed?

OVERVIEW OF STUDIES

The first study is a qualitative study set in rural Ghana that explores the occupational identity of entrepreneurs, the informal institutions that shape it, and how the roles and characteristics of being an entrepreneur may affect innovative entrepreneurial behavior in contexts of poverty. Interviewing entrepreneurs in rural villages in Ghana, I began by asking “what does it mean to be an entrepreneur here”? While prior work has discussed the influence of institutions on occupations (Bechky, 2011), the notion of ‘entrepreneur’ as an occupation, with its own identity and subsequent role prescriptions, shaped by institutional forces, provides an opportunity to understand entrepreneurs’ behaviors and decisions not from an individualistic perspective but from a more socially constructed and socially embedded lens.

Study two builds on findings from study one, where I learned that the norms, practices and scripts embedded in the mental schema or frame of ‘entrepreneur’ as an occupation help to shape what is considered to be legitimate or appropriate behavior for entrepreneurs in a given

setting. In certain settings, such as those I have chosen for the empirical settings of my dissertation, this socially constructed mental frame may constrain an entrepreneur's ability to innovate in important ways, yet many entrepreneurship training programs fail to address it. Taking this basic insight as a starting point, in study two I designed a field experiment to test how and whether this frame could be changed in the minds of entrepreneurs. The experimental intervention involved creating two versions of an entrepreneurship training. Both trainings taught identical content – types of innovation, and the entrepreneurial process – but differed in the examples and cases that were used to help participants make sense of the materials, which were interspersed throughout the content, as well as interwoven throughout a series of ongoing exercises and meetings following the training. The goal was to provide reframing content that involved switching from an “entrepreneurship as subsistence” frame to an “entrepreneurship as innovation” frame, using two different reframing strategies – frame breaking and frame bridging – to identify which would be more resonant with participants, and more successful at changing their behavior.

In the final study, I approach the same broad topic and dependent variable, but from a cognitive perspective. The impetus for this study stems from a series of correlations I identified in the course of my analysis of the data from study two. In the baseline data for this study I collected two measures of my participants' resource states: socioeconomic status (SES) and income. I noted through my analysis that both correlated with a number of outcome variables. For example, SES correlated significantly with the likelihood that individuals consider pursuing an innovative entrepreneurial opportunity to be likely, attractive and feasible, as did income. SES also correlated with the amount of effort individuals put into the training intervention, such as the likelihood that they attended the follow up meetings, completed the exercises they were given by

the trainers, and (marginally) the number of ideas they tried. Income correlated significantly with a self-reported measure of the innovativeness of their ideas, as well as (marginally) their sense of entrepreneurial self-efficacy. While this relationship between resources and outcomes was not the focus of study two, they led me to extant research on the “scarcity mindset” (see, e.g., Shah, Mullainathan, & Shafir, 2012; Mullainathan & Shafir, 2013; Mani, Mullainathan, Shafir, & Zhao, 2013) and a research question of whether and why a scarcity mindset affects individuals’ ability to ideate, as well as the likelihood that they will act on a new business opportunity. Through two lab experiments, I find that a scarcity mindset does affect individuals’ ideational capabilities by way of causing differences in the level of effort exerted on the task. Perhaps more importantly, I also find that the capability to ideate can be improved by inducing a more munificent mindset. Finally, I test the effect of a scarcity mindset on the likelihood that individuals will act on a new business idea, and find that scarcity also impacts this stage of the entrepreneurship process, with entrepreneurial self-efficacy acting as the mediating mechanism.

From both a practical and theoretical perspective, these three studies each attempt to contribute to furthering our understanding of an issue at the heart of many poverty alleviation efforts – how to harness the power of entrepreneurship to help people help themselves. Practically speaking, despite some successes, many of these initiatives have failed to produce anticipated results, and I attempt to identify some of the informal institutional and cognitive barriers that may be hindering such efforts. Moreover, I identify some theoretically grounded approaches with the potential to help address these barriers, and empirically test their effectiveness. The studies also make theoretical contributions. Study one’s findings contribute to the entrepreneurship literature by emphasizing the socially constructed nature of entrepreneurship as an occupational identity, and by showing how informal institutions can

affect entrepreneurial innovations, diverting resources and constraining agency, particularly within “island networks”. Building from these insights, study two seeks to reframe these informal institutions through a cognitive reframing approach, thereby contributing to the framing literature. Specifically, this study contributes to the microfoundations perspective on institutional change by shedding light on how individuals’ schemas can be changed by various reframing strategies, in turn also changing behavior. Finally, given the resource-constrained nature of my contexts of interest, in study three my findings contribute to a theoretical perspective that takes resource constraints not as a contextual factor nor even as an objective reality, but rather as a factor that affects the mindset of entrepreneurs. Specifically, this study’s findings not only illustrate the detrimental effects of a scarcity mindset on entrepreneurial outcomes, but also that this mindset is malleable, and that fostering a different (more munificent) mindset may improve entrepreneurial outcomes, via the mediating mechanisms of task effort and entrepreneurial self-efficacy. Taken together, these three studies promise both practical and theoretical import.

**STUDY ONE: THE OPPORTUNITY NOT TAKEN: THE OCCUPATIONAL IDENTITY
OF ENTREPRENEURS IN CONTEXTS OF POVERTY**

ABSTRACT

Innovative entrepreneurship is an essential but often missing outcome of poverty alleviation efforts. This qualitative study set in rural Ghana explores the occupational identity of entrepreneurs, the institutions that shape it in isolated “island networks”, and how it influences entrepreneurs’ practices and decisions. I find that the institutional forces of “collectivism” and “fatalism” feature prominently. Being an entrepreneur in such settings means being a mentor, market link, and community safety net, and the types of opportunities entrepreneurs pursue are largely seen as pre-destined and inherited rather than individually chosen. As a result, the pursuit of innovative opportunities may be significantly limited.

INTRODUCTION

Poverty is considered to be among the world's most intractable global challenges (Alvarez and Barney, 2013; Bruton, Ketchen, & Ireland, 2013). This intractability is often attributed to a confluence of various factors that hinder economic growth, including structural features (e.g., poor transportation and communication infrastructure), and institutional features (e.g., a dearth of formal market institutions). Stimulating entrepreneurship is a favored approach used by nongovernmental organizations (NGOs) and their funders (London, 2007, Kistruck, Beamish, Qureshi, & Sutter, 2013) to address poverty, particularly in rural villages where poverty is nearly universal (Yunus, 1999). Development organizations have begun to deliver training programs and microfinance to build entrepreneurial capacity, however many of their efforts have failed to produce the hoped-for results (Alvarez & Barney, 2013; Stenholm, Acs, & Wuebker, 2013). Existing programs often introduce specific, replicable business templates, under the assumption that broader entrepreneurial activity will follow (Bradley, McMullen, Artz, & Simiyu, 2012). Contrary to assumptions, efforts of this kind often result in over-entry in these specific businesses, resulting in imitation and excessive competition, rather than the pursuit of a broader range of opportunities for innovation and growth.

One reason for these marginal results may be a lack of understanding by interveners of what it actually means to be an entrepreneur in such environments. This would be ironic, given that this "teach a man to fish" approach to development was itself a response to a more antiquated "top down" style of aid. Yet without a robust understanding of what "entrepreneur" means in such contexts, these well-intentioned efforts may paternalistically attempt to "shoehorn" an ill-fitting Silicon Valley model of entrepreneurship into impoverished contexts.

In this paper, I take a step back from the growing body of literature that describes the processes and strategies that NGOs and other social entrepreneurs use to successfully shape markets and institutions (see, e.g., McKague, Zietsma & Oliver, 2015; Mair, Marti, Ventresca, 2012; Mair & Marti, 2009), to investigate why projects designed to stimulate entrepreneurship often fail to produce the kind of growth-oriented, innovative entrepreneurship that creates substantive (and less precarious) value. While prior work has examined barriers to entrepreneurship associated with human capital (Alvarez & Barney, 2013), financial capital (Bradley et al., 2012) and formal institutions (De Castro, Khavul & Bruton, 2014; De Soto, 2000; North, 1990), this inductive empirical work led me to question how informal institutions affect innovative entrepreneurial behavior in poor rural contexts. I focus on informal institutions for three primary reasons. First, impoverished communities typically lack formal institutions, resulting in a reliance on informal institutions to guide behavior (Mair et al., 2012). Second, they are typified by dense social clusters, tightly connected internally but with few links to outside groups, or what I refer to as “island networks”. This island network configuration amplifies the reliance on informal institutions, as the geographic or social isolation inherent in this configuration results in a lack of external templates for action. Finally, the resource constraints associated with poverty further exacerbate the effects of these island networks, as individuals are often reliant on each other to a degree that can make social sanctions a matter of life and death.

Interviewing entrepreneurs and other existing/past community members in rural villages in Ghana, I began by asking “what does it mean to be an entrepreneur here”? Initial observations suggested that the occupational identity of an entrepreneur was considered distinct from the identities of other occupations (farmer, teacher, etc.). Moreover, the entrepreneurial occupational identity was a central component of who the individuals engaged in it were, and what their status

or legitimacy was in the eyes of others. This occupational identity was shaped by institutions, with social prescriptions for how individuals should appropriately enact the role of entrepreneur. While prior work has discussed the influence of institutions on occupations (Bechky, 2011; Anteby et al., 2016), the notion of ‘entrepreneur’ as an occupation, with its own identity and role prescriptions, shaped by institutional forces, has not received much scholarly attention (Burton, Sorensen, & Dobrev, 2016). Moreover, while prior work has documented that identities may be activated by environmental cues, the study of what it means to “be an entrepreneur”, and how that meaning is shaped by the institutional environment, remains understudied, even in a more traditional North American context (Burton, Ahlstrom & Li, 2010; Hwang & Powell, 2005; Tolbert, David & Sine, 2011). An occupational lens provides an opportunity to understand entrepreneurs’ behaviors and decisions from a more socially embedded perspective. Specifically, I studied entrepreneurs’ occupational identities in order to better understand why entrepreneurs perceived and acted on some opportunities and not others, and the institutionally-mandated obligations and constraints they faced within rural villages.

These findings suggest that the entrepreneurial occupation in rural Ghanaian villages featured obligations and constraints arising from two primary informal institutional forces: collectivism and fatalism, both of which are associated with dominant cultural values in African societies generally (Gyekye, 1996; Idang, 2015; Mbiti, 1975; Onwubiko, 1991). These institutional forces seemed to exercise a form of “latent control” (Bechky & Chung, 2017) on entrepreneurs’ actions, limiting the range of options they considered and their ability to invest in innovation and growth. Interestingly, entrepreneurs who were “outsiders”, that is, less embedded in their communities, appeared to face fewer entrepreneurial constraints than community insiders. While these obligations and constraints likely affected other aspects of life in this

environment, such as decisions related to marriage, family planning, or school, I specifically considered the effects entrepreneurs' institutionally-conditioned occupational identities have on their entrepreneurial behavior, how they may be at odds with western notions of entrepreneurial behavior, and how this incongruence may influence NGOs' success in fostering entrepreneurship. Additionally, while there may be other institutional forces at play, my data, corroborated by extant African scholarship (see, e.g., Lutz, 2009), suggested collectivism and fatalism to be particularly salient in issues related to entrepreneurship.

My contributions are threefold. Whereas prior work has described how informal institutions affect market participation more broadly (e.g., Mair et al., 2012), my findings contribute to the entrepreneurship literature by showing how entrepreneurship is a socially constructed phenomenon: informal institutions in this context affect entrepreneurial innovation, diverting resources and constraining agency, because they shape the occupational identity template that entrepreneurs must follow to be considered legitimate. Contributing to the theory of whole networks, I theorize that the constrained entrepreneurship I observed is likely to also be seen in other contexts with similar island network configurations featuring densely connected clusters with few links to outside groups, such as ethnic enclaves, immigrant or indigenous communities, or remote regions. Such configurations amplify the effects of informal institutions on behavior, since they feature a dearth of alternate templates for "ways of being". I further suggest that conditions of poverty exacerbate this effect because of the highly interdependent and resource constrained realities of village life in such contexts. Moreover, in impoverished island networks, the informal institutions of collectivism and fatalism appear to play a very important role, likely because in such contexts, cooperation and collective efforts are key to survival, and at the same time, a lack of resources can erode individuals' sense of agency. Finally, I contribute to

the development literature by challenging the appropriateness of interventions based on disembodied Western ideas of entrepreneurship, and point to the value of attending to informal institutions which prescribe and proscribe the behavior of entrepreneurs. My findings promise substantial practical implications for entrepreneurial interventions in contexts of poverty.

LITERATURE REVIEW

Stimulating Entrepreneurship in Impoverished Island Networks

Despite three decades of development interventions by international aid agencies and governments, over a third of the world's population remains in poverty (Alvarez and Barney, 2013; Bruton et al., 2013). Development agencies have increasingly focused on fostering entrepreneurship as an important vehicle to break the cycle of poverty (Hall, Matos, Sheehan, & Silvestre, 2012). With few exceptions, such efforts have largely generated imitative opportunities, whereby individuals use the money and training they receive to replicate, both in scope and scale, existing businesses within their community (Alvarez & Barney, 2013; Bradley et al., 2012; Gielnik, Kramer, Kappel, Frese, 2014; Maas & Herrington, 2008).

In such environments, both imitative and innovative forms of entrepreneurial activities have a role to play in economic development. For example, imitative opportunities can allow would-be entrepreneurs with less training or exposure to entrepreneurship to reduce their risks as they learn valuable business skills (Kistruck, Webb, Sutter, & Ireland, 2011; Shane, 1996). Nonetheless, increased supply of the same product or service without a corresponding increase in demand will typically decrease profitability in the long run (Baumol, 1993; North, 1990; Schumpeter, 1934), and more innovative types of opportunities are needed to achieve sustainable economic growth, (Schumpeter, 1934; Gielnik et al., 2014; Rosenbusch, Brinckmann, & Bausch,

2011). In this paper, I take a broad view of innovative entrepreneurship. For example, an entrepreneur introducing a product that is new to her community (new product); an entrepreneur introducing a new element to an existing service, such as cell phone charging while you get your hair cut (new service); an entrepreneur employing a new business model, such as the rental of farm tools to customers (new business model); an entrepreneur finding a more efficient way of pounding fufu, a cassava dish (new process), and an entrepreneur scaling up her operations to service new customers (new market) would all be considered innovations for my purposes.

As prior research has noted, contexts of poverty possess attributes which create barriers to innovative entrepreneurship, including a lack of resources such as more ‘risky’ forms of financial capital (i.e. equity as opposed to loans) or skilled human capital (Alvarez & Barney, 2013; Bradley et al., 2012; Cooper, Gimeno-Gascon, & Woo, 1994). NGOs have tried to address these barriers with interventions focused on both human capital (such as entrepreneurship, technical, literacy and numeracy training), and financial capital (such as microfinance, village savings and loan groups, credit unions, and the provision of income-generating assets) (Korten, 1987). Yet, the lack of improvement that has been the result of focusing interventions on such barriers suggests that other factors may be inhibiting innovative entrepreneurial activity.

Several key features of most resource constrained settings provide clues in this regard. First is a set of structural features that serve to geographically and/or socially isolate inhabitants, such as poor transportation and communication infrastructure, and limited possibilities for mobility. This sets the stage for an island network social structure that is typified by dense internal connections but extremely limited connection to external networks. This isolation may be geographic, or it may be social, but it typically results in a lack of external models for action, amplifying the reliance on the norms and beliefs, or informal institutions, that enable and

constrain social life within that small cluster. Second is a relative absence of formal market institutions. As Mair, et al. (2012) elaborated, settings featuring weak formal market institutions remain governed by informal institutions, which guide market behavior, and often yield conflicting institutional prescriptions. These informal institutions are not only amplified by the effects of island network isolation, but are further exacerbated by the high degree of reliance on one another, making social sanctions via a loss of legitimacy even less likely than in more resource munificent conditions. In other words, resource constraints both create the conditions for island networks, and then serve to further exacerbate the degree of adherence to the prescriptions and proscriptions of informal institutions under such conditions. For these reasons, I argue that entrepreneurship, alongside many other aspects of life in such contexts, will be substantially influenced by informal institutional forces.

Entrepreneurship as an Embedded Occupation and Occupational Identity

Occupations are socially constructed categories of work which include the practices and actors involved, as well as the “structural and cultural systems upholding the occupation” (Anteby et al., 2016: 187). These categories can infuse work with meaning and significance (Bunderson & Thompson, 2009); determine appropriate levels of compensation (Nelson & Barley, 1997); and clarify the values and mandates of category members (Fayard, Stigliani, & Bechky, 2017; Howard-Grenville, Nelson, Earle, Haack, & Young, 2017). Occupations have been referred to as both “institutional carriers” (Scott, 1995), formed by and answerable to various groups of “moral constituencies” (Leavitt et al., 2012) and shaped and monitored by occupational members themselves (Howard-Grenville et al., 2017). These external prescriptions (that is, what others, both inside and outside of the occupation expect of occupation members), have significant internal implications, as occupational members navigate these prescriptions and

make sense of how being a good member of the occupation affects their identity (Anteby et al., 2016). These internal understandings are thus informed by external expectations, but are also used internally as guidelines for how to behave. This shared understanding (Lawrence, Suddaby & Leca (2011) describes members' "occupational identity" (Nelson & Irwin, 2014).

Occupational identity is therefore the set of self-understood normative prescriptions that guides the behavior of members belonging to a common social category of work (Kreiner, Hollensbe, & Sheep, 2006; Ashforth et al., 2013; Thornton & Ocasio, 2008), connecting institutions to individual behavior (Bechky, 2011; Scott, 1995; Anteby et al., 2016). As Lawrence, Suddaby and Leca (2011: 52) note, "all action is embedded in institutional structures", and occupational identities, as shared understandings within social communities, are institutional structures. They are also relational structures, defined vis-à-vis others' expectations (Leavitt et al., 2012). Those embedded in a particular social community internalize the norms, values and practices that exist within that community, both to preserve social bonds (Creed, et al., 2014), and because they take them for granted as the way things are and ought to be (Meyer & Rowan, 1982). Moreover, these norms provide answers to the question, "What does a person like me do in a situation like this?" (Weber, Kopelman & Messick, 2004: 281; Leavitt et al., 2017). To be an entrepreneur, for example, is a distinct occupation (Burton et al., 2016) with its own occupational identity. The occupational identities of nurses (Goodrick & Reay, 2010), pilots (Fraher & Gabriel, 2014) and librarians (Nelson & Irwin, 2013), have been shown to influence the actions and interests of occupation members. For example, Nelson and Irwin (2013) explore how librarians' occupational identity hindered them from identifying innovative opportunities related to the use of technology in their occupation.

It follows that entrepreneurial behavior will also be influenced by the “entrepreneurial occupational identity”, and vary among specific social contexts. Occupational identity is concerned with “who we are”, and “what we do” (Ashcraft, 2013). The entrepreneurship literature has identified entrepreneurial role identities, such as inventor, founder or developer (Cardon, et al., 2009), or Darwinians, communitarians and missionaries (Fauchart & Gruber, 2011), along with their effects. For example, the founder identity has been linked to strategic responses to resource constraints (Powell & Baker, 2014); opportunity identification (Mathias & Williams, 2014); decisions to forego the certainty of employment for entrepreneurship (Hoang & Gimeno, 2010); and core decisions such as market segment, focal customer needs, and deployment of resources (Fauchart & Gruber, 2011). However, these works primarily emphasize entrepreneurs’ individual identity choices (who I am) as atomized selves without considering the institutional pressures at the occupational level, nor the associated behavioral constraints (Glynn, 2008; Nelson & Irwin, 2013). While a few studies have focused on regional differences (Saxenian, 1996), community based entrepreneurship (Peredo & Chrisman, 2006), or other social influences on entrepreneurship (Navis & Glynn, 2010; 2011; Wry, Lounsbury & Glynn, 2011), we still know little about entrepreneurship as an embedded phenomenon.

Some prior work has explored the social construction of market-based activities in developing countries, suggesting that the behavior of market actors is strongly influenced by the overlapping social spheres within which they are embedded (Mair et al, 2012; Webb, Tihanyi, Ireland & Sirmon, 2009). Furthermore, such social influences are often exerted at a very localized level (Jennings, Greenwood, Lounsbury & Suddaby, 2013; Marti, Courpasson & Dubard Barbosa, 2013; Peredo & Chrisman, 2006). Thus, given that occupational identities are “activated by environmental cues (Leavitt et al., 2017), the types of activities an entrepreneur

undertakes are at least in part determined by the type of behaviors their local community considers to be appropriate for an entrepreneur. Yet, we know little about what comprises an entrepreneur's occupational identity, even in a North American context. We know even less in rural contexts of poverty, which is important because it is likely to have a significant influence on the opportunities people perceive, the way they enact these opportunities, and the constraints that guide their behavior. Without knowledge of informal institutions, interventions by NGOs and others to stimulate entrepreneurship risk being misguided and ineffectual.

In this study, I focus on how informal institutions, adhered to by both community members and entrepreneurs themselves, create a shared understanding of appropriate entrepreneurial behavior and thus influence that behavior. Reflecting this shared understanding, I use the sensitizing lens of occupational identity to ask the research questions: (1) How do informal institutions shape the occupational identity of entrepreneurs in impoverished island networks?, and (2) How does this occupational identity influence innovative entrepreneurial behavior? I contend that answering these questions will provide a better understanding of why innovative entrepreneurship is relatively rare in poor rural villages.

STUDY CONTEXT AND METHODOLOGY

Study Context

I elected to explore my research questions within the impoverished regions of northern Ghana. Ghana had a long and illustrious reputation as an enterprising trading hub, well preceding a colonial presence (Robson, Haugh, & Acquah Obeng, 2009; Takyi-Asiedu, 1993; Buame, 1996), and today, Ghana is not among the lowest income countries, as its poverty rate has decreased from 32% in 2005 to 24% in 2012 (World Bank, 2016). Ghana's formal market

institutions that foster entrepreneurial behaviors are also among the best in Africa, and a combination of government policies, socio-cultural factors, human and financial capital, and perceptions of bureaucracy and corruption have contributed to growth in the entrepreneurial sector (Robson & Obeng, 2008). The number of new limited liability companies has grown from 4,287 in 2004 to 13,154 in 2012 (World Bank's Doing Business Data). While anecdotal evidence points to a resurgence of a robust enterprising culture among Ghanaian urbanites (consider recent Ghanaian success stories such as Koko King, which began in 2008 with a driver and a cook and in less than a decade has grown to over 100 locations and over 50 employees; or Unique Trust, which began as an informal free lending service and grew to a \$29 million financial services company), significant challenges remain. Most rural areas, particularly in the north where this study is located, have poverty rates up to three times the national average (IFAD, 2016). Some studies indicate that upwards of 70% of Ghana's poor live in rural areas, predominantly in the north, where drought and disease inhibit basic welfare and economic growth (Nelson, Ingols, Christian-Murtie, & Myers, 2011). Furthermore, despite extensive efforts at designing and implementing entrepreneurship training programs within such regions, and strengthening the overall level of formal market institutions at a country level, imitative and replicative types of entrepreneurship continue to predominate (Doing Business Survey, 2016; Robson et al., 2009; Gielnik et al., 2014; Maas & Herrington, 2008). Rural Ghana is thus an ideal context in which to explore my topic.

Women dominate the SME sector in rural northern Ghana (Buame, 2000; McDade & Spring, 2005; Dzisi, 2008), while men focus primarily on farming. The yields of farming cover major household expenses, yet women must often search for ways to fill in the gaps during the "hungry months" or as a result of bad harvest, as well as cover "extra" items such as school fees

for children. The small enterprises they stimulate typically range from ad hoc “petty petty”¹ trading within the community, to relatively larger scale, or “big time” buying and selling in regional market towns, from whom the petty traders buy in small quantities. Some women trade from shops (typically owned by men), although most use a mobile “hawking” system for their sales. Regardless of size and success, it is rare for traders in this context to grow to a point where they would hire employees, instead relying on their children and other family members.

To collect this data, I engaged with an NGO operating within northern Ghana which had been fostering entrepreneurship-related activities in the region (basic market access, sustainable livelihood training, and microfinance interventions) over the past decade. Working with an established organization with strong on-the-ground presence is important within such contexts given the difficulty of soliciting interviews with entrepreneurs in remote regions.

Methodology

As summarized in Table 1, a total of 37 individuals were interviewed to inform my research question. Initially, I interviewed thirteen entrepreneurs and thirteen other local community members from across six communities. These communities were all located in the northern region of the country, and I found no systematic differences across the communities. At the same time, I interviewed three development and entrepreneurship experts from the NGO sector. Subsequently, I interviewed eight “insider/outsidiers”; that is, individuals who came from rural remote villages in northern Ghana but had subsequently moved to Accra. Of the full sample, I interviewed twenty-one women and sixteen men, although all the entrepreneurs were women (as trading is predominantly “women’s work”). The entrepreneurs in my sample traded a

¹ Ghanaian communities use the term “petty petty” to refer to the smallest scale of trading, often involving the purchase and sale of one or a few objects at a time, due to capital constraints.

range of raw and value-added products. Some entrepreneurs made their own products, some were petty traders, some went to larger markets to sell community members' products and buy products to sell either directly or to other petty traders, and some acted more as a transporter of goods for others. Some were successful, others had failed, and still others had failed in certain aspects of their business, only to achieve success later. Given my focus on perceptions of occupational identity at the institutional level, I felt it was necessary to get the perspective both of entrepreneurs and other individuals within the communities who could provide an external perspective on the 'entrepreneurial occupation'. I also used this to triangulate my findings between the entrepreneurs, community members, and other informants. In my findings section, interviews are labeled with the convention, Cx = community member x, Ex = entrepreneur x, I/Ox = insider/outsider x, and Nx=NGO member x.

Table 1: Interviewees

Comm.	Individual	M/F	Products Sold	Successful/Failed
1	Entrepreneur (E1)	F	Shea oil	Successful
	Comm. Member (C1)	F		
	Entrepreneur (E10)	F	Trader, makes dawadawa cake	Successful
2	Entrepreneur (E2)	F	Maize	Failed
	Entrepreneur (E14)	F	Okro, rice, beans	Successful
	Comm. Member (C6)	M		
3	Entrepreneur (E3)	F	Shea	Successful
	Entrepreneur (E4)	F	Maize, soybeans, oil	Successful
	Entrepreneur (E15)	F	Shea butter/dawadawa	Successful
	Comm Member (C7)	M	Farmer	
	Male Champion (C8)	M	Farmer (Maize, millet, yam, soy)	
	Comm. Member (C9)	M		
	Comm. Member (C10)	M	Millet farmer	
4	Entrepreneur (E5)	F	Maize/millet	Successful
	Entrepreneur (E16)	F	Petty trader	Failed due to customers not repaying loans
	Comm. Member (C5)	F		
	Comm. Member (C11)	M	Farmer	
	Entrepreneur (E17)	F	Petty trader	Successful
5	Entrepreneur (E6)	F	Petty trader	Successful (owner of physical storefront)
	Entrepreneur (E7)	F	Maize/bean cakes	Successful, prior failure
	Comm. Member (C12)	F		
	Entrepreneur (E12)	F	Pharmaceutical products	Successful
6	Entrepreneur (E8)	F	Porridge seller/trader	Successful
	Entrepreneur (E9)	F	Rice and bean maker	Successful
	Comm. Member (C13)	M		
	Entrepreneur (E13)	F	Petty trader, farmer	Successful
NA	Field Officer (N1)	M		
NA	Field Officer (N2)	M		
NA	Field Officer (N3)	M		
NA	Insider/Outsider (I/O1)	F		
NA	Insider/Outsider (I/O2)	M		
NA	Insider/Outsider (I/O3)	M		
NA	Insider/Outsider (I/O4)	M		
NA	Insider/Outsider (I/O5)	M		
NA	Insider/Outsider (I/O6)	M		
NA	Insider/Outsider (I/O7)	M		
NA	Insider/Outsider (I/O8)	F		

Given the under-theorized nature of the occupational identity of “entrepreneur”, particularly within contexts of poverty, a qualitative research design was deemed appropriate (Maguire, Hardy, & Lawrence, 2004). I used semi-structured interviews, focus groups and observation as a means of allowing discussions to be informed by extant theory, but also allowing me to pursue unanticipated avenues of interest (McCracken, 1988). I used an inductive theory-building approach (Glaser & Strauss, 1967), sensitized by institutional theory to focus on the normative, cognitive, and identity-based barriers to entrepreneurial innovation.

Data collection began with an initial field visit to obtain a broad understanding of common entrepreneurial activities along with previous interventions to increase entrepreneurial activity within the region. I visited multiple markets, observing entrepreneurs in naturalistic settings and conducting interviews and small focus groups. This initial stage, along with additional fieldwork in rural Ghana on related research, allowed me to hone my research questions and sensitizing concepts, the broad themes of which had been identified from the entrepreneurship, identity, institutional theory and poverty literatures. My initial research interests focused on perceptions of entrepreneurs as they related to the legitimacy, status, or even stigma, of their work. The main insight that arose from this initial trip was that while the development sector generally focused significant resources on building product knowledge and sales techniques such as “hawking”, their approach did little to explicitly address deeper underlying issues related to what it meant to be an entrepreneur in these settings. For example, while there is no word for entrepreneur in the local language, I noted that community members perceived the occupation of entrepreneur to include central and distinctive components relative to other occupations in the community (Whetten, 2006), and they expected entrepreneurs to fulfill certain expectations. No stigma appeared to be attached to the occupational identity, but

rather legitimacy was associated with the functions the occupation filled in the community.

These and other insights led me to surmise that the occupational identity of an entrepreneur, with its embedded roles and expectations, may be crucial for understanding entrepreneurial behavior.

I used these nascent insights to create a semi-structured interview guide that focused on: (1) understanding the diverse roles and expectations embedded in what it means to be an entrepreneur in that context (the entrepreneurial occupational identity) (2) the most prominent institutional forces that shape that occupational identity, and (3) the behaviors that are tied to it (McCracken, 1988). I then conducted a second wave of data collection, beginning with questions related to the absence or presence of innovative or growth-oriented practices, such as why or why not someone might decide to take a chance on new products, markets, processes or practices in her business, maintain trade secrets to guard market share, increase prices when demand increased, or hire someone to increase capacity. I updated the questions frequently throughout my data collection. These lines of inquiry both enabled me to understand the individuals' businesses generally, and allowed me to identify constraints, when questions of "whether" became questions of "why not" that appeared to be linked to those decision outcomes.

In a final round of data collection, I held a series of focus groups with eight individuals that I call "insider/outsider" informants. I realized that while my initial set of primarily community-based informants were able to describe their own practices, it was more challenging for them to recognize the implications of the institutional forces they had helped me to identify, and how these institutional forces affected entrepreneurial behavior. By their nature, institutional forces are taken-for-granted, and often invisible to those embedded within them. Institutional effects can be surfaced when one enters another environment that operates with different institutional forces. I hoped that my insider/outsider informants would be able to provide further

detail into the differential ways that outsiders were affected by institutional prescriptions, as compared to insiders. As individuals who came from rural remote villages in northern Ghana but had subsequently moved to Accra, I felt that these individuals were uniquely suited to act as contextual boundary spanners and facilitate my deeper understanding of these issues.

The interviews were conducted, recorded and transcribed by me and another researcher using two NGO field officers as local interpreters who were fluent in the local languages spoken by interviewees and deeply familiar with the context. Traveling with the field officers allowed for real time sensemaking and clarification after each community visit and allowed for quick refinement of questions once it became increasingly clear to me that, by asking about business practices, the respondents were describing motivations that were often tied to their roles and obligations to their community. The data were analyzed using Atlas.ti following well-established methods for qualitative field research (Strauss & Corbin, 1990; Gioia et al., 2013), and followed two main stages.

Stage 1: Understanding Collective Obligations and Fatalistic Constraints. After an initial reading of the transcripts, I conducted an open-coding process to identify the roles and characteristics associated with entrepreneurship as an occupational identity. This involved coding the raw data into first-order codes, and combining such codes into meaningful second-order themes, dividing some categories into sub-categories, and dropping idiosyncratic or low-frequency categories (Lofland et al., 2006). I began with the entrepreneurs' own words on the kinds of activities they found to be appropriate and inappropriate. In parallel, I questioned how others assessed the legitimacy of those behaviors and the status of entrepreneurs who engaged in them, shaping my nascent understanding of entrepreneurs' occupational identity. For example, initial nodes that started as "lending money", "ready cash", "buying in advance of harvest" and

“selling on credit”, evolved to the first order concept of “Social safety net”, the second order theme of “collective obligations” and was linked to the aggregate dimension of “Occupational identity of embedded entrepreneurs”. As the analysis progressed, I began to see differential expectations of individuals who were not originally from the communities I investigated, and this raised new questions about the role of social ties, and how those who were not as embedded in the community may have been held to different social prescriptions as entrepreneurs.

Stage 2: Exploring Implications and Boundary Conditions. This stage of data analysis focused on my final round of data collection, although it also involved iterating between these accounts and entrepreneurs’ own. My aim in this stage was to strengthen my understanding of two primary linkages: 1) the differential standards that outsiders were held to depending on their level of embeddedness in the community, and 2) the links between the institutional obligations and constraints I heard about and their effects on innovation.

The result was a set of obligations and constraints that collectively constitute entrepreneurship as an occupational identity in the Ghanaian context, along with a set of choices which are affected by these obligations and constraints and a boundary condition of degree of embeddedness. These themes and aggregate dimensions were then organized into a model demonstrating how the concepts relate to each other. This model is depicted in Figure 1. In addition, Table 2 presents additional representative quotes for each of the first order codes.

Table 2: Data Table of the Collective Obligations/Fatalistic Constraints of Embedded Entrepreneurs, and Differential Treatment of Disembedded Entrepreneurs

<p>Collective Obligations within Occupational Identity of Embedded Entrepreneurs</p>
<p style="text-align: center;">Social Safety Net</p> <p><i>“They see them to be people who are willing and ready to help, they can easily help... If you have a problem you can easily run to them... [What kind of help?] They can borrow someone money, if you don't have food you can go to them they will give you food... if you want to farm and you don't have maize, or money to get a tractor they will give you money... to plow your farm. Sometimes if after planting you don't have money to buy fertilizer you can run to these people and they will help you with money and you will buy fertilizer and apply. Later on when you harvest you will pay them back.” (E5)</i></p> <p><i>“My mother brews pitu. What happens is that sometimes there are some women who are in the villages. They'll come. They don't have money, so you give them money and when the millet is ready, they just bring it back in repayment of the money they came to take from my mother. I have seen this have value.” (I/O7)</i></p> <p><i>“When the rainy season starts and you just sow your ground also, maize or whatever and you have to honor your children school fees and you don't have money, you can go to this [entrepreneur] and let him give you some amount of money in the hope that when you harvest your products, you will give it back to him as a repayment of the money you took from him. Those things happen. Most of the business people, they tend to help out people when it comes to financial crisis.” (I/O6)</i></p>
<p style="text-align: center;">Consistent market linkage for critical goods and services</p> <p><i>“They help the community to actually develop, considering the fact that you would have had to travel a long distance to get what you want. So if someone in the community is able to bring it to your doorstep, you should be happy about that.” (C7).</i></p> <p><i>“An entrepreneur is somebody who is really [able] to ensure that what they want is available at the time they actually want it.” (N1).</i></p> <p><i>“A lot of people see those people to...to provide things that are not in the community.” (I/O3)</i></p> <p><i>“They see them as people handling themselves well, people who are able to support, bring things that that we can't get closer to us.” (C10)</i></p>

Mentor and Role Model

“Even in this community there are other people who are starters. They don't know how to do the shea butter, they come to us and we train them.” (E14)

“Because of how people who see you when you work it pushes someone to also work, because as I am right now I started trading and I'm seen as somehow successful so if someone's seeing me and that might motivate someone to also start work, because of how they see me, they see me to be successful it might also help someone to start working.” (E5)

“There are no formal rules in starting a business...but if there is unity the person will come and see me the one who is already selling and tell me that oh I also want to start this business...[what does that mean?] If she sees that I am elder to her I started the business first and she respects that I started first then she will come and see me. [To ask permission to start?] Just to inform me but not to ask permission. Just to inform me that I also want to start this business. So that they will all work together, they can all be doing it together.” (E9)

Fatalistic Constraints within Occupational Identity of Embedded Entrepreneurs

Boundedly Agentic

“The village have this kind of belief that ... it is something that the whole village believes in, that when you're not doing well, spiritually someone is looking for your downfall.” (I/O3)

“Most people that operate businesses around there have some ... I don't know how I'm going to describe it but it's like a belief ... It's not actually a ... It's like a belief, they have a place when they make sacrifices almost like yearly or it depends on the person. They have to sacrifice almost every year, in order for the gods or like the ancestors to continue to bless them and protect them. Something of that nature.” (I/O3)

“If you stay there for long, you would experience thing that will make you believe that it works and you would have to resort to protecting yourself from those things...You see somebody is fine roaming about, but he starts a business and if he's not to be the philanthropic type, then you see that the business collapses without a specific reason. The things are there, the business is not moving. Nothing is going on. You see somebody is not putting in any effort to drive the business to grow, but then you see people going there every day, and the business is booming. So people tend to believe that it's a spiritual, so they're pushed to go into their spiritual aspect either to protect themselves or for the prosperity of their business. So, basically the businesses that operate there, most of them people have perceptions that they have spiritual help.” (I/O4)

“When religion comes in, the mind doesn't really think, yes 'cause if you bring in spirituality you wouldn't even look to say that maybe because my products are not presentable that is why people are not buying into them or because people don't really need them, that is why they're not buying into them. But they, they see that maybe someone somewhere trying to get them for in terms of their business.” (I/O2)

Boundedly Successful

“If you are around my age mate and you have a motobike and you can just dip your pocket and

remove money, people will start suspecting you...but you have these possessions, so they start suspecting you that you have gone to acquire it in a wrong way, or you've had the money through a wrong means." (E8)

Sometimes, we have this song they say, if something ... if you're doing something and it's not going well, there's no other person who can ... who would want your downfall but the person who would want your downfall, is from your home, so the people tend to say that because you are moving out of the house to do something innovative or to do something for yourself, the people that ... the house don't really want you to get to anywhere so they tend to say that those at home are looking for your downfall. (I/O2)

You see, sometimes as I am growing up, the way you're doing your business, and all of a sudden you become very big on the specialty, people will start to accuse you of being maybe a witch...There is a woman who sells bean cakes that are quite special...People will start accusing her of other stuff, and that will bring her business to a fall. (I/O5)

There was an instance where in my village I wanted to start something up, do you understand? I thought of food, of bringing up a provisions shop, just something small. I was told if I start something like that, people will see me to be very rich in the community and when they see you as a student starting up something like that, they're like, "I've been here" or "I was doing before you and I couldn't make that money to start a business like that, and you are starting something like that." They would try you in a way, and if you aren't lucky, you can die, you can go mad, or you can get some kind of sickness that would prevent you from going into their business. That deterred me from taking that risk. (I/O5)

Follower of an Inherited Path

"Most people who are into trading take it from their mothers' line because their mothers are always engaged in [e.g.] shea butter. So people who do shea butter, it's most likely that their mothers are also doing shea butter." (N2)

"In the community you see that it's this type of business. This family is into this type of business. They are known with that type of business. Is believed that the business secret is known within the family, that's why they take on that business." (I/O3)

"And there was another guy who the mom doesn't ... She can't read and write, but she was these market women, but they buy the foodstuff like in bags. So she was supplying the schools in the upper East, so when the mom died the son had no option than to go into that business. So just took over from where the mom stopped." (I/O4)

"So with that belief even if the business, like economic situations are not favoring the business, they would see that the economic situations are not favoring that business anymore, but they'll see that he has mismanaged the family business, so he's wayward or he's something like he's not a real member of the family, that's why the business is not moving over." (I/O3)

Disembeddedness Loosens Collective Obligations and Fatalistic Constraints

“Looking at the cripple, the cripple is not... a member of that community. The cripple is a Fulani. So, it's most likely they perceive her as an outsider... So if you buy an outsider's product you necessarily have to pay. But this [other] woman was selling to family members, or even members of the community where she was living all her life, so they might decide not to pay her because of the familiarity that they have with her. So they are so familiar with her that they would jokingly not pay. But this one is a strange person, you can't just use jokes and not pay, so she's a fulani married into... not grown in that community.” (N2)

“If you want to make it, you stay [outside the village]. You don't go back home. You stay outside of your home or outside of where you are coming from... 'Cause if you happen to do something like that around your area, the responsibilities will come...If you come to fill everything that they do in the village, there's no way you can survive. 'Cause almost everything, you are expected to contribute something.” (I/O2)

“Most of them don't like being in the community, if they happen to start something of that nature, coz every community member run to you with their problems and other things.” (I/O2)

“With the foreigner ... most people wouldn't like to associate themselves with you, or to seek help from you because they believe oh even if you get help from this person, that help you're going to get wouldn't be of any better use.” (I/O4)

“Back in our community, the superstition level is high. People believe in those things and they showed they actually work. They don't want to establish businesses there because people who are envious of them will harm them spiritually. Some don't want even to stay there because they think they will harm them spiritually...So a lot of people get discouraged when it comes to investing in their own community.” (I/O4)

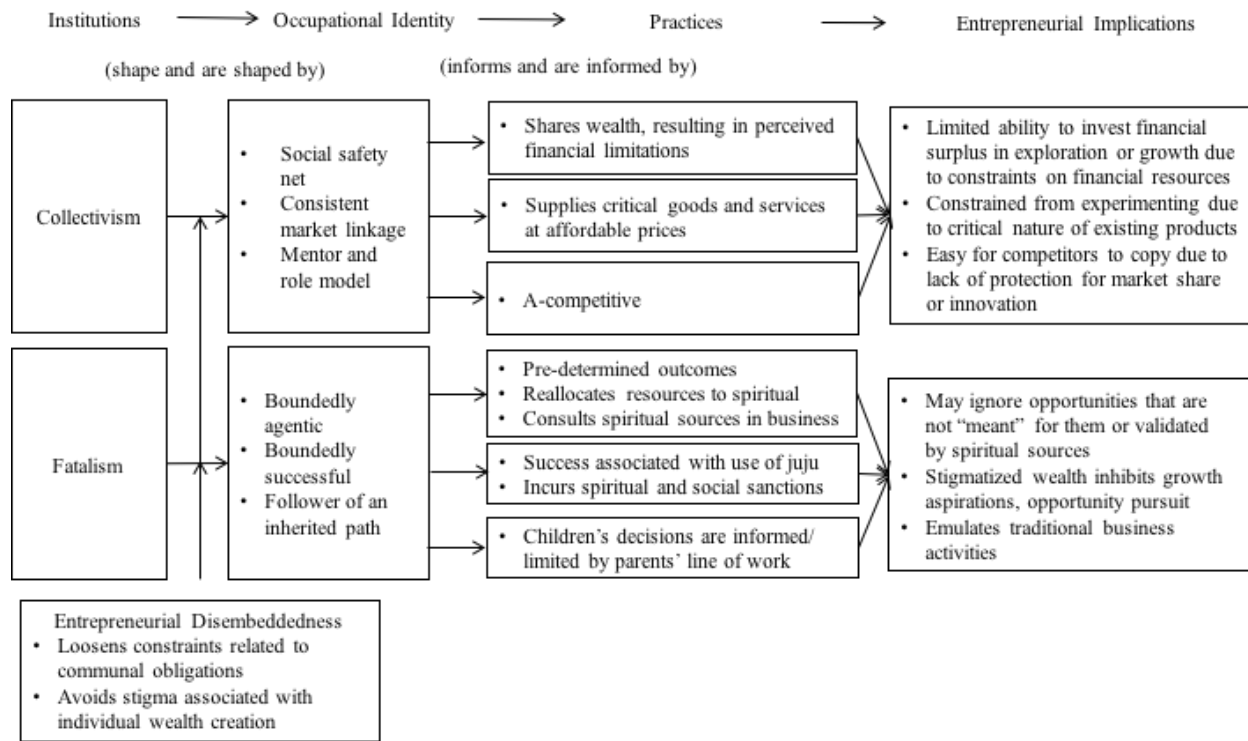
FINDINGS

While being an ‘entrepreneur’ is often associated with the identification and exploitation of new opportunities, my data suggest that in rural Ghana, this occupation is primarily associated with the fulfillment of obligations and acting within constraints. While an entrepreneur in developed market settings is often characterized as being innovative, autonomous, visionary, and risk-taking (Hoang & Gimeno, 2010; Murnieks & Mozakowski, 2007), within my impoverished setting, it is predominantly associated with being a mentor, a reliable intermediary, and a social safety net for other members of the community. Therefore, behaving in an experimental, growth-oriented, or competitive manner would be counter normative, going against not only society’s perception of appropriate behavior for an entrepreneur, but also the entrepreneur’s occupational identity, and could actually jeopardize the status and legitimacy of an entrepreneur within her community. Furthermore, the types of opportunities an entrepreneur in such settings pursues are largely seen as pre-destined and inherited rather than a result of individual agency and choice. More specifically, my data suggests that it is often religious leaders and older family members that provide direction on the types of opportunities that should be pursued as compared to market forces. The result is often replication and emulation rather than variation.

Shaping this occupational identity were two dominant institutional forces: collectivism, emphasizing a set of social obligations to the community; and fatalism, emphasizing a set of constraints on entrepreneurial behavior. As organized in Figure 1, I discuss each in turn, and provide empirical support for how each shapes the occupational identity of entrepreneurs, and the practices stemming from these components, including how these practices may have implications for entrepreneurial innovation and growth. I also highlight that these effects were

suggested by my data to be conditional on the degree to which an individual was considered embedded in a community.

Figure 1: Institutional Antecedents, Occupational Identity Components, Resulting Practices, and Entrepreneurial Implications



Collectivism and the Obligation of Community Utility

Collectivism is a social norm which emphasizes the priority of the group over the individual, and in my context, is a pervasive institutional force that emphasized the utility that entrepreneurs could provide to the community. In this sense, the legitimacy and status of entrepreneurs in rural Ghana were predominantly derived not from their wealth (Thebaud, 2015), but from the degree that they provided social utility or value to the community, creating a set of collective obligations associated with the occupational identity of entrepreneurs. Collective obligations in this context involved not the creation of innovative products and jobs, but rather

the direct sharing of wealth, connections, and knowledge accumulated through their entrepreneurial efforts. Within this ‘community utility’ component of the entrepreneurial occupational identity, the three functions most often discussed were; (1) their obligation to be a financial safety net (not only to their family but to the broader community), (2) their obligation to be an intermediary of critical goods (or market linkages), and (3) their obligation to be a teacher or role model to the next generation of entrepreneurs.

Obligation to be a social safety net. The obligation to be a social safety net appeared to be a fundamental element of the occupational identity of entrepreneurs in this context. Indeed, my data seems to suggest that this was in some ways the very definition of entrepreneur:

“[Entrepreneurs are] those who buy production, even if I have a production that is yet to bring. Someone who can assist you when you are desperately in need so that you can then bring the product later. So the person should be ready to sell on credit, that is a good entrepreneur.” (C10)

Conversely, those who did not heed this prescription, were seen as something other than an entrepreneur:

“They see you as a savior. Coz probably if I'm traveling to Wa and I don't have enough money to board the car, and you allow me, where I'm going, I might get money to pay you, they consider you as a good person, a philanthropist...But if solely your aim is to make money, then, they see you as an opportunist. You have come to take away from them rather than to help them. That's how I think they perceive entrepreneurs. Either they see you as an opportunist, or they see you as somebody who has come back to help the poor people of society. If you deny them [cash], they see you in another way.” (I/O2)

While the entrepreneurs I interviewed were expected to make enough profit to maintain their business, my data suggests that their primary role in the community was to provide financial assistance when needed, typically by lending money to other community members, by extending credit when individuals require something and cannot pay, by acting as a

“pawnbroker” when someone has an urgent requirement for money and needs to liquidate an asset, and by advance-purchasing crops from farmers during the “hungry months” that occur just before harvest.

While most theory linking entrepreneurship to economic development assumes that entrepreneurs will seek to maximize their financial self-interest (McMullen, 2011; North, 2003), my data suggests that entrepreneurs in this context may forego opportunities for financial gain in order to maintain legitimacy and earn higher status within the community:

“What is very important is your readiness to actually support others in the community, [such as] selling to them on credit... if you are just a trader and your focus is the profit, then you might even be wealthy, but... you will not get respect from anybody, you are not considered to be somebody who is influential and someone who is having higher status.” (E9).

Not only do such entrepreneurs extend credit, but they may also give up profit opportunities:

“Some of these people don't really do it because they want to get money out of it. They are doing it to help the community. Because, looking at it, if you are going to buy maybe the drugs or the provisions we are talking about in the central of the district, it means you'd be getting them at the higher price. When you come back, and you're going to sell them at the higher price, I'm not sure they'll be able to buy. These people buy them, bring them to the villages and they reduce the price. Most of them pay the cost for the community to be able to also gain from what they have bought. The community will always see them as people who are helpful...Most of them really sell at a little profit.” (I/O3)

The dominant occupation in such settings is that of farmer. However, farmers experience large cash flow fluctuations, with spikes after harvest, followed by deep troughs. Through constant trading, entrepreneurs have more stable cash flows, and they are expected to have “ready cash” available to lend to others within the community when they are in need;

“There is some status attached to being a trader because if someone needs urgent money and has goods then they will know that when they go to this woman she will have ready cash... I have money as a trader. I always have ready cash waiting so when someone needs something urgently then they can come to me.” (E2)

Because the financial slack of entrepreneurs in this context must be ‘available’ for community members, entrepreneurs’ ability to use any financial slack they may have to experiment with new products and services, or grow their business, appears to be significantly constrained. This includes, for example diversifying their product line or hiring staff:

“[I would not diversify my business] because I don’t have money and then I started with this business for long so I don’t want to divert. Moreover, I don’t have money so I just prefer to stay in my line of business” (E1);

“I never employed anyone to help me in the business... Yes I think if I had someone to help to assist me, I would have sold more, because there was an instance when I went and bought 10 bags but I still had money but because I could only manage 10 bags I only brought back the 10 bags and left the money. So if I had someone I would have given the extra money to the person who would also use it and go to a different place. [Why didn’t she ever do that?] Because I could manage with the 15 bags, and I had only 10 bags at that time, [and] there is no money, I didn’t have money (E5).”

In the second quote, the entrepreneur said she had financial slack, but then when asked why she did not hire a person, she claimed it was because she did not have money, directly contradicting herself. This suggests that the perception of not having spare money is pervasive enough to make the idea of experimenting with new products or hiring staff seem out of reach. Additionally, investing cash in new products or services meant taking on an additional level of financial risk that they could ill afford given existing commitments to provide ready cash to the community;

“These [entrepreneurs] ... they bring [new products] to the community at their own peril. They can’t bring any new innovative things.” (I/O3)

In summary, prior research suggests that slack resources induce experimental, proactive behavior (George, 2005), innovation (Nohria & Gulati, 1996), and entrepreneurial growth (Bradley, Wiklund, & Shepherd, 2011), particularly in hostile environments (Bradley, Shepherd & Wiklund, 2011). In this context, however, the entrepreneurs needed cash reserves on hand to help community members and thus did not perceive themselves to have the slack resources that could have been directed towards innovation and growth.

Obligation to be a market linkage. Another obligation that entrepreneurs are expected to assume under the banner of ‘community utility’ is that of market linkage, i.e., being a consistent link to distant markets that contain critical goods. Because of the remote and inaccessible nature of these poor communities, this intermediary function has important social utility, saving the community the significant time and resources needed to travel to a market. The entrepreneur is seen as someone who is willing to assume risk on behalf of and for the benefit of the community, and she is particularly important if it is a necessity, or a critical good or service:

“They trust and respect them and have value for them, [they are] somebody who will [take] risk to provide you with what you want to buy.” (C11)

“An entrepreneur is one who ensures there is no shortage of supply.” (C9)

This constrains entrepreneurs’ ability to innovate or grow their business in at least two ways. First, because these goods are often critical to survival, entrepreneurs (despite recognizing opportunities) may feel unable to branch out into different, more innovative products, because, as suggested by resource allocation theory (Evers & Mehmet, 1994; Webb et al., 2009) a decision to purchase one item is likely to require trade-offs – precluding them from buying some of the usual things, particularly given the resource constraints described above, and given that entrepreneurs often innovate by acting on demand before demand actually exists (McMullen &

Shepherd, 2006). Not supplying the usual things in order to test demand for a more novel item would also entail a social cost, given community expectations.

“They are happy for the service they provide and they are proud of that, especially when the entrepreneur can ensure that there is a constant supply, when the entrepreneur is always eager to go and buy when their supply runs out.” (C8)

Second, when entrepreneurs did attempt to bring in novel products, my respondents related how entrepreneurs were still unable to profit, discouraging them from acting on opportunities:

“My dad started a drug business back in the village... coz he realized they didn't have access to most of the drugs that would help cure some basic diseases that were harming people around there...After he started the drug shop, even those who could afford the drugs wanted to have it for free because they knew him, they have been with him and they and they feel like the drug shop is a way of giving back to society. They forget that in order to sustain the business, you would have to pay the person bringing in the products, in order to buy more, for other people to get. So, eventually he had to close down the shop because people were coming in for credit and after that you can't even ask the person. If you ask the person, he's like, it's for all of us, more or less. And then they will give you a scenario like, if it were your kid dying and then you needed a drug to cure the kid, would you refuse? And if you don't have money to pay, what do you expect them to do? So eventually, it will collapse. If you don't want it to collapse then you end up pumping all your money into it... it discourages people from getting into businesses from where they come from.” (I/O2)

In summary, prior work suggests that when firms have an established reputation for something, it becomes harder to identify new business opportunities “because identity becomes intertwined in the routines, procedures, and beliefs of both organizational and external constituents, explicit efforts to shift identity in order to accommodate identity-challenging technology [or products] are difficult” (Tripsas, 2009: 441), and can suppress the ability to identify and seize opportunities outside of the “identity domain” (Livengood & Reger, 2010). In my context, entrepreneurs had difficulties in branching out into new goods as it could consume

the capital that they needed to supply existing goods, jeopardizing their ability to fulfill their role linking the community to distant markets and products. Adding novel products, even if needed by the community, often simply became new sources of obligation rather than opportunities for entrepreneurial growth.

Obligation to be a teacher and role model. The occupational identity of an entrepreneur also included the obligation to be a teacher and role model within the community, influencing the way in which entrepreneurs viewed competition. Rather than seeing others who sell the same products and services as competitors that should be forced out of business, or people with whom they should not share trade secrets, entrepreneurs felt a responsibility to train them.

“I train people in my area...not only my children but [non-family member] come because they know I'm experienced in this...I'm not afraid [of competition] and it's not a problem because I'm just helping someone to get something to start.” (E3).

Entrepreneurs were also seen as aspirational figures or role models.

“We have other beginners and then they aspire to be like me because ... they've seen my achievements and so they also look up to me.” (E14).

Given that innovative and growth-oriented entrepreneurship focuses on value capture, this lack of competitive orientation is significant. Although this more communal approach to entrepreneurship provides certainty and lowers the risk of all would-be competitors within the community, it also lowers economic returns and precludes the ability for first mover advantage or for those with specialized knowledge to benefit from these advantages. Incumbents cannot guard their market share, and it is easy for competitors to learn from, and copy, existing businesses. As we know from studies of institutional voids related to protecting property rights and innovations (Webb, et al., 2009; Broadman et al., 2004; Bruton et al., 2010; De Soto, 2000;

Heidenheimer & Johnston, 2002), when entrepreneurs cannot be sure they will capture the value of innovation, innovation is stifled. This leads me to draw a connection between the inability to protect trade secrets or market share and the perpetuation of imitation rather than innovation.

Fatalism

My data also suggested that fatalism, by which I refer to a taken for granted belief in the inevitability or predetermined outcomes of economic life, represented a second strong institutional force. This appeared to stem from both religious/spiritual and family sources. Religion and spirituality appeared to play a prominent role in shaping the occupational identity of entrepreneurship, and they are influential in shaping economic life in Ghana and many other contexts of poverty (Keister, 2008; 2011). I refer to both spirituality and religion because, although most Ghanaians are either Christian or Muslim, many also still adhere to a tribal religion. Within this ‘religious/spiritual’ component of the entrepreneurial identity, there were two primary sub-characteristics related to the types of opportunities individuals elected to pursue: (1) being boundedly agentic in their decision-making orientation, and (2) being boundedly successful in their goal orientation.

Boundedly Agentic. By bounded agency, I refer to my informants’ suggestions that an entrepreneur’s path was to a large degree predetermined, but at the same time open to some alteration through the consultation of and reallocation of resources to spiritual sources. My data suggested that, rather than opportunities stemming from knowledge that other entrepreneurs do not possess, they are largely seen as outcomes that are predetermined by fate, which was also referred to as destiny: *“If someone is destined to get money, that person will get.”* (E14); or luck: *“What makes someone successful in business? She thinks it is luck.”* (C12). The primary source

of fatalism appeared to emanate from the tightly overlapping spheres of religious and business institutions within such settings. More specifically, my data suggested that business outcomes were thought to be as much linked to prayer: *“When she wanted to go into the soya, she prayed, and then decided to give it a try.” (E11)*, as well as the contributions entrepreneurs make to religious institutions as to the economic choices they make regarding their business;

“I give the chief something...when the chief is coming for Friday prayers, I might just meet him on the way and then give him some amount and tell him, “oh, when you go, you pray that my business will expand and grow more”. But it's not compulsory, but I just give him just for him to do prayers that my business will grow further.” (E9).

This high level of engagement with spirituality may cause a misreading (or lack of reading) of market signals. For example, some informants suggested that entrepreneurs attribute their success and failure to “spiritual competition” over market advantages:

“And even with regards to spiritual aspect, you see most of these communities they don't know what competition is because even if the thing is competitive, and the other person is selling more than the other one, the other tends to see that maybe the person has taken the shop to a spiritual shrine or something like that. So that you'll be able to get customers, and this is where the competition even comes. The competition is always coming from the spiritual aspect instead of maybe promoting your product for real business competition. They rather tend to be a spiritual competition instead.” (I/O3)

At the extreme, my data indicated that entrepreneurs looked to religious leaders to ‘foretell’ which decision would provide them with the most success, rather than seeking knowledge from market sources to determine what business actions to take:

“Before you start a business, you would go and seek advice, see spiritual leaders... Not the chief, someone who has learned to divine the future. The spiritual leader would just look into the future and tell you whether your business will be successful.” (N3).

This fatalistic rather than agentic orientation towards decision-making may hinder innovation in important ways. Specifically, my data suggested that spirituality may hinder

individuals' alertness to innovative opportunities, because they look to spiritual rather than market sources of insight, and assume spiritual rather than effort-based determinants of success:

"It doesn't promote their innovation because they only believe their spiritual aspects can help them. So in terms of marketing, finding innovative ways of packaging their products to the consumers. They don't think of that. All they think of is that the end of the month or the year I'm going to sacrifice to this particular god." (I/O4)

"They'll be like, 'I'm doing this business. It's not working out for me. I think this is where God has really placed me, maybe to cook food ... If God has really placed me to being a vendor, why don't I just go into that?' They try all places and it doesn't work out. When they try being vendors and they become successful, they claim that that was where God has really placed them. That is what God has made for them. (I/O7)

By contrast, attending to market signals and effort-based determinants of success would more likely lead to innovation:

"Some will definitely sit down to say that, why is my business not doing well? That is those who don't really take the spiritual aspect of business, they would sit down to say why is my business not doing well. Maybe it's because of the people don't really need what I bring on board. That is when you use your mind and innovation shall come." (I/O2)

In addition, even when individuals in contexts of poverty may be alert to more innovative opportunities, and recognize them as a viable market gap, the consideration that this opportunity was not "meant" for them may prevent them from actually pursuing such opportunities:

"You see, there was this friend of mine...He was very good at cooking and also very good at selling. He was a very good marketer, but the thing is he actually thought because he was the best cook in the house, he was supposed to, or that was where God has placed him. He decided to set a business, a food business ... I advised that he should have added ...maybe having a shop and still having that, but he refused because he thought he was ordained to be a food vendor. Do you understand? It came to a point that he never saw selling shirts or selling stuff, other stuffs, as being important. It really affected him very much. He'd have made more money if he had taken the two together. Do you understand? He was a good marketer and a very good cook as well." (I/O5)

Finally, even in instances where entrepreneurs decide to pursue opportunities that are different than those that currently exist within their communities, they may be unlikely to attempt to grow their business unless it is validated by spiritual sources:

“The thing with innovation, when you have a business, you have a business, if you are selling this, you are selling this. They are not looking at how they are going to add up more businesses or more things to sell... they know that this is the business they have and this is what they are doing. They don't look forward to it going so big. They think that it looks like they are always content with the quantity of product they have. With regards to spirituality, they only go to the spiritual houses to seek for protection. Sometimes they also seek for direction, the sense of direction but I don't think it helps.” (I/O3)

Collectively, these forces favor the pursuit of more traditional business opportunities instead of more innovative ones during each of the various stages of entrepreneurship, or as one informant summarized: *“Spirituality dampens the spirit of the innovation”*. (I/O4)

Boundedly Successful. My data also suggested that religious/spiritual forces significantly influenced the limits of ‘entrepreneurial success’ within this setting; high levels of financial success amongst entrepreneurs were stigmatized or tainted, causing jealousy and competition among other entrepreneurs and the broader community. This may appear to contradict my earlier findings that individuals were generally collectivist and a-competitive. Yet, I interpret this apparent contradiction as further highlighting the strength of collectivist norms: as long as everyone is relatively equal, entrepreneurs can “afford” to be a-competitive. However, as soon as someone appears to become significantly more successful, jealousy and competition ensue. In the communities I interviewed, this resulted in accusation that the entrepreneurs’ success was associated with the use of spiritually nefarious means (referred to by my informants as juju).

“Someone might just accuse you that you've gone to get medicine ... juju to get wealth. If you are wealthy, someone will accuse you. ...they don't associate with them...People will start suspecting you...that you have gone to acquire it in a wrong way.” (E8).

In fact, my informants explicitly recognized that this phenomenon was often rooted in jealousy of high levels of entrepreneurial success:

“To me I felt it was jealousy. She had a competitor...just next door. The woman's daughter accused the one... who came earlier, who was there before she came that she was a witch and she was the one who could see from afar. She had four eyes, and so she saw the woman going to Burkina Faso to take whatever to come and add to the pitu... Spiritual stuff to come and add to make people come. Because she had more people, customers coming, they wanted to bring down the customers. To me, that's what I saw, but to other people, they saw it as really true that she was a witch.” (I/O5)

Furthermore, my informants expressed concerns that in response to entrepreneurial success, other community members may use nefarious spiritual means themselves to attempt to block these individuals from their success:

“There are people in communities who don't want anyone to prosper...These people have black magic and they use it against people they envy...” (N3).

The stigma of entrepreneurial success as being linked with evil may significantly inhibit the growth aspirations of entrepreneurs, as people may be reluctant to achieve (or appear to achieve) entrepreneurial success. For example, individuals described visible investments into business growth (such as the purchase of a motorbike), as liabilities, because they draw attention to one's entrepreneurial successes, which may incur social penalties like being accused of juju, or having juju done to you. Informants also described the penalties associated with “enjoying” one's entrepreneurial success, or even conveying a sense that this is “your” money at all:

“They turn out to be liabilities...this sort of regenerating [investment] into their business. Liabilities like ... Some of them they see there's a need for a motorbike. When you buy this motorbike, instead of using the motorbike to be helping your business, it is not for a movement. You just put a standard in your life or in the community that you have been able to buy a motorbike, who will see that way. It's not for the purpose of the business.” (I/O5)

“You have to just be very careful whatever you do ... When you make some little money, you shouldn't think as if, this is your money. You can't just enjoy and live life the way you want and all that. You should know that when you're growing, these people, you are with them. Some of them are older than you... You are the young one and you are making money, obviously they'll be very jealous on you... You should have a very cool way of relating with them, if they have a bad look on you, they will eliminate you. Just be very careful. That's how it is. You just have to know how to play your cards.” (I/O8)

Thus, being boundedly successful was an important component of the entrepreneurial occupation, making it less likely that entrepreneurs would pursue opportunities that are different or that might lead to higher success, since they could then be perceived as illegitimate.

Follower of an Inherited Path. Fatalism also refers to social constraints related to family. More specifically, it appeared that the business activities of entrepreneurs often imitated that of their parents and grandparents. I have labeled this component as follower of an inherited path.

Whereas in a ‘content-rich’ environment where it is typically assumed that a nascent entrepreneur will identify a range of potential opportunities and subsequently evaluate the one which is most promising (Shane & Venkataraman, 2000), my data suggested that the identification of opportunities in contexts of poverty is a highly myopic process whereby young entrepreneurs focus simply on acquiring skills related to their family’s historical business activities. Within such settings, it is common for children to be the primary workforce for businesses as opposed to paid employees (Evers & Mehmet, 1994). The result is an ongoing emulation of prior business activities, even as the young entrepreneur matures.

“Most of the villages...find these kinds of businesses to be something that is hereditary. They think that your grandfather did this, your father got up and did this, so you can do it...So it's more or less something in your genes. Your grandfather was able to do it, your father took over from him, so it's now time for you.” (I/O4)

More generally, this emulation based on lineage follows from the fact that, within such remote contexts, the primary access to information related to business knowledge, skills, and expertise is through one's family as opposed to formal education or other sources. As a result, individuals are not exposed to unique knowledge stocks or a diverse set of experiences as they graduate from adolescence to adulthood (Shane & Venkataraman, 2000; Webb et al., 2010). Ultimately, this limits the likelihood of recombining different knowledge and skills to innovate upon existing practices and reinforces a fatalistic acceptance that imitative entrepreneurship is the "right" path:

"Well, it comes with an obligation...to continue with the succession of the business. But as for innovation it doesn't really bring in innovation, because that same business that was being carried on, is the same thing you are coming to take over." (I/O3).

Moreover, attempts to deviate from this path are met with severe sanctions from community members, deterring would-be entrepreneurs from entrepreneurial action, as my data suggests that such action is not only a business risk, but also a risk of ostracism from the community:

"If you are doing something different outside what your family has gone to be known to, they tend to say, "ah, this was what your family was doing, and they were doing well in the business, what are you going to change in business?" You will not even succeed in it. Yes, because it's not part of your family. So if you are bringing that kind of thing in, it wouldn't work cause you are not known for it." (I/O2)

These sanctions come not only in the form of verbal sanctions but also in the form of community boycotting of a business that deviates from the norm of family-based industries:

"They feel like your family is destined to do this. This is what your family is known for. This is what you should do. So once you venture into something else, they have a thinking that it won't be right. And once they have that thinking, they won't patronize it. And he didn't patronize it, the business collapses. So it affects innovation." (I/O3)

As a result, my data suggests that even those who are able to see innovative opportunities, and aspire to exploit them, end up following the inherited path that their lineage has paved for them:

“...the guy was a genius. He was doing planning. I'm not sure after his planning was thinking of coming to take over the cattle business because he had some other innovative thoughts...But because this was his family business, he has resorted to doing the family business instead of doing the innovative thoughts he had with his planning. So I think with this, it doesn't really bring innovation.” (I/O4)

In summary, the influences of collectivism and fatalism together reinforce the emphasis on imitative entrepreneurship rather than innovative or growth-oriented entrepreneurship because they divert resources away from exploration, competition and growth, and they limit agency to well-trodden paths, avoiding the possibility of becoming too successful.

Differential Treatment of Outsiders

A key moderating factor in the constraining influence of informal institutions that emerged from the data was the degree to which the entrepreneur was embedded (insider) or disembedded (outsider) from the community. Insiders typically grew up within the community and had strong social ties to other members of the community. Outsiders, on the other hand, may have traveled to or migrated to the community from other villages, often through marriage, or they did not belong to the dominant tribe within the community. This distinction was not absolute; rather it could vary by degrees, such as my insider/outsider informants, who were insiders in the sense of being born and raised in a community, but were outsiders in the sense that they had moved away.

Differential Treatment of Outsiders with Regards to Collectivism. The collectivist obligations related to being a social safety net did not appear to apply equally to entrepreneurs who were perceived to be ‘outsiders’.

“Those who are from [the village], they see them more of philanthropic than business men. But when someone should come from somewhere to establish a business, I think they see him more or less a business man.” (I/O3)

“If you're from the place... you've established a business there, the way the people see you is different from a foreigner who has established a business there. They feel, the foreigner is somebody he can't rely on...in terms of help. But then you, who are from the community they feel, they can rely on you in times of trouble. So, the treatment is different.” (I/O4)

My data suggested that this may result in individuals not investing in their own communities, but rather going elsewhere.

“They prefer to invest in a neutral place where no one knows their roots, than to go back where they come from. For instance, going back to my community to start up something, everybody knows me there. If somebody comes to me to ask for something, I can't refuse. From a humanitarian point of view, I can't refuse coz they are my people and you have to help them. It wouldn't motivate me to bring a new product. It would only give them the perception that I have more money, so they would have to come to benefit more from what I'm bringing. Not to help me to sustain my business. I think that's why people don't really invest there, not to say they don't have money, they do.” (I/O3)

A primary reason community members were less likely to rely upon outsiders as a source of ‘ready cash’ is that they perceived them as a riskier form of borrowing compared to insiders;

“If you owe an outsider, it's a disgrace, so you do all you can to pay the outsider. But the family member, it's not a disgrace. The person can't take you anywhere, the person can't let them arrest you for anything, so they are comfortable to not pay...” (N2).

This freedom from obligations, particularly related to the requirement to have “ready cash” to lend or give to community members, appeared to come with considerable competitive

advantages. My informants related anecdotes and personal experiences that outsiders, without the obligations that encumbered insiders, appeared better able to grow their businesses, find new supplier channels, and identify value-added products, often even in spite of other challenges. For example, one informant, when asked to identify the most successful entrepreneur in the village, related a story about a “cripple”, who was an outsider who married into the community. She had amassed significant wealth, despite her physical disability, by drawing from external supplier and buyer relationships. Another informant, a “Fulani” or gypsy, clarified that despite her entrepreneurial success, she would not likely become a target for community members asking for money; this financial slack was therefore available to her to innovate and grow her business.

Differential Treatment of Outsiders with Regards to Fatalism. My data suggested that being an outsider also may moderate the degree to which entrepreneurs are bound by the institutional norms related to fatalism. For example, my data suggested that outsiders often felt immune to the necessity of providing spiritual gifts or sacrifices:

“Well, from my community there have been several people that have moved out of the community and have come back to set up businesses and they believe that oh, I don't need to make any sacrifice in order for my business to sustain.” (I/O 4)

In addition, the constraints related to “bounded success” seemed to apply less to outsiders. My data suggested that community members did not feel the same malice towards outsiders who become successful entrepreneurs, nor think they'd achieved their entrepreneurial success because of nefarious spiritual practices:

“They are happy that I'm successful [Do people think you have gotten your wealth from wrong means?] As for that perception, it's not there. When I just sell they come to buy because I'm a different tribe from the people in this community... I'm not part of them... That is why they don't really mind me... It may be that if I was part of them and I was successful maybe they would think otherwise, but because I'm outside that might be the reason why no one is minding me and I'm successful.” (E9)

Additionally, my data suggest that the institutional forces related to following an inherited family were not as constraining for entrepreneurs that were less embedded within the community;

“But I think with that, maybe if you as a child you have been outside, outside the community and you have learnt certain things, just like us... I think because of our exposure, we would find a way to make the product marketable, because they didn't have this opportunity we have. We are exposed to a lot of things. So I think even if we are going to do that same line of business, I think our innovation is going to come from the exposure we have had outside our communities.” (I/O4)

DISCUSSION

Taken together, my findings suggest that informal institutions of collectivism and fatalism shape the occupational identity of entrepreneurs in the rural Ghanaian context as one of primarily obligation and constraint rather than primarily opportunity, as is more typical in western contexts. As a result, the types of ventures that entrepreneurs with such an identity pursue are largely imitative, and not innovative in nature. Whereas prior research studying the ‘broken link’ between individual-level entrepreneurship and large-scale economic development within impoverished regions has focused on underdeveloped formal institutions and the accompanying lack of access to financial and human capital, my study suggests that informal institutions are prominent factors that can inhibit the pursuit of more innovative opportunities. While individuals in these contexts are clearly innovative in many aspects of their lives, surviving under conditions of extreme hardship, my findings suggest that the informal institutions of collectivism and fatalism in contexts of resource scarcity shape the occupational identity of entrepreneurs, which diverts resources away from innovation and limits agency to traditional, low-growth paths.

However, my findings also suggest that the experience of those who were outsiders to the community can provide an interesting counterfactual: outsiders appeared less constrained by obligations, opening the possibility for more innovative or growth-oriented entrepreneurship. Casting further afield², I also note that there are examples of innovative entrepreneurship, such as Koko King and Unique Trust, in urban Ghana where such informal institutions are not as likely to be dominant. In urban environments, there are more potential sets of institutional norms, embedded in a greater diversity of networks, simply because there are more people, often coming from different places. These counterfactuals suggest that the level of embeddedness is a highly salient factor in this lack of innovation.

My findings also contribute to network theory. Prior work linking institutional theory and social networks to innovative entrepreneurship has already begun to examine the ‘dark side’ of network ties (Maurer & Ebers, 2006; Ruef, Aldrich, & Carter, 2003), suggesting that social networks comprised mainly of strong ties constrain creativity by recycling redundant information (Ibarra, 1992; Tortoriello & Krackhardt, 2010). My findings support this effect, but also add more nuance and a normative mechanism to explain it. I speculate that the structure of networks in rural Ghana exacerbates the negative effects of embeddedness on innovative entrepreneurship. Poor, rural communities are often tight-knit, with dense interrelationships among members, limited travel opportunities and relatively few external influences on village life, operating as relative social “islands”. In contrast to what network theorists describe as small world networks, which have strong ties within clusters and short path lengths (limited separation) between clusters (Watts & Strogatz, 1998; Gulati, Sytch & Tatarynowcz, 2012), the communities I describe feature strong ties within clusters but a relative absence of ties between clusters. They

² With thanks to one of our reviewers.

are relatively self-contained system, and as Gulati, et al., (2012) suggested, such networks will result in homogeneity among actors with sanctions against deviant behavior.

I extend these ideas to the context of innovative entrepreneurship and show how informal institutions affect them. Informal institutions, including beliefs, values, behavioral scripts and social norms, are likely to have a stronger influence in island networks because the dense interrelationships among members and limited external influences mean that embeddedness is very high. I suggest that island networks inhibit innovative entrepreneurship not only because of lack of information, but also by weaving obligations into the entrepreneurial occupational identity, limiting entrepreneurs' agency, and diverting their resources away from competitive differentiation and innovation and towards supporting the community. Outsiders to the community appear to face fewer of these constraints, and my findings hint at the possibility that even insiders may be able to become aware of and even discard these 'appropriate' roles and functions, particularly if they disembed themselves, either physically or emotionally, by exposing themselves to alternate occupational templates. This effect would be consistent with the "island" metaphor; it would be rare for an outsider with few local ties to come to an untraveled "island", and, upon arrival, that outsider would be likely to remain unembedded in the island's indigenous institutions and social networks for many years.

An island network structure also reduces the likelihood of innovative entrepreneurship because it restricts access to alternative norms and ideas, recycling redundant information (Ibarra, 1992; Tortoriello & Krackhardt, 2010) instead of bringing in new ideas – the opposite of the innovation-enhancing characteristics of small world networks (Gulati, et al., 2012). Innovation often comes from actors who span boundaries, observing different ways of operating, and juxtaposing different means-ends relationships (Greenwood & Suddaby, 2006). When

entrepreneurs are limited to homogeneous perspectives in island networks, they are less likely to imagine other options, constraining agency. Thus I argue that island networks strengthen the effects of informal institutions and in the context of poverty, contribute to the limited innovation associated with constrained entrepreneurial occupational identities. My findings thus provide insights on both network structure and content together, merging insights from network theory and institutional theory, and responding to recent calls to add content considerations in studies of network structure (Owen-Smith & Powell, 2008; Battilana & Casciaro, 2012).

My findings also contribute significantly to the entrepreneurship literature. Recent efforts have focused on distinguishing between the many different types of entrepreneurship – for example, commercial versus social entrepreneurship (Austin, Stevenson, & Wei-Skillern, 2006), or individual versus corporate entrepreneurship (Martiarena, 2013). The most pertinent delineation in the study of entrepreneurship in contexts of poverty has been the contrasting of “necessity” and “opportunity” entrepreneurship (Acs, 2006). Necessity entrepreneurs are thought to be ‘pushed’ into self-employment by a lack of employment possibilities as opposed to being ‘pulled’ towards exploiting a new business idea (McMullen et al., 2008). Indeed, the vast number of entrepreneurs in contexts of poverty are labeled as necessity entrepreneurs (Minniti, Bygrade, & Autio, 2006). Many of the entrepreneurs I interviewed were indeed engaged in basic self-employment activities out of necessity. Yet extant work on necessity entrepreneurship does not capture the constraints on innovation which come from the resource diversion and agency limitations associated with socially embedded entrepreneurial identities.

Further, while entrepreneurs in other places may choose various types of entrepreneurship, the choices of entrepreneurs in rural Ghanaian villages are more contextually limited. Collectivism and fatalism were embedded into what it meant to be an entrepreneur in

this context. To those who study African culture and values, this finding would be unsurprising. “Community is the cornerstone in African thought and life” (Mbigi, 2005: 75), and community members “can attain their own true good only by promoting the good of others” (Lutz, 2009: 313), sharing what they have, being caring and compassionate (Tutu, 1999). In addition, “religion in African societies seems to be the fulcrum around which every activity revolves” (Idang, 2015: 98): “To be is to be religious in a religious universe. That is the philosophical understanding behind African myths, customs, traditions, beliefs, morals, actions and social relationships” (Mbiti, 1975). Yet the practice of development entrepreneurship in African contexts rarely seems to account for the powerful sway of these informal institutions, rendered even more powerful in homogeneous and interdependent island networks. As Lutz (2009: 317) argued in the context of MBA education, “theories that were created within and for individualistic cultures are not at home within communal cultures. This mismatch between theory and culture means that many African managers cannot practice what they have been taught.” It would be countercultural and unethical to work for individual gain alone.

My study suggests that the only way to avoid being saddled with innovation-limiting obligations would be to disembed oneself, an idea rife with risk for many rural Ghanaians because it could come at the cost of social support. A popular African proverb says “Go the way that many people go; if you go alone, you will have reason to lament” (Emeakaroha, 2002, citing Davidson, 1969: 31), and the outside of one’s community is said to be seen as a void offering no possible life (Onwubiko, 1991). Nonetheless, as my insider/outsider interviewees demonstrate, it is possible for some to leave their communities and become more reflexive, and less bound by the norms. Future research is needed into the conditions which affect one’s ability to disembed oneself in such contexts. Furthermore, there is likely much divergence in different parts of Africa

in the extent to which these informal institutions have power, and future research should investigate the factors which affect the power of these informal institutions. I contend that the island network structure of rural Ghanaian villages is a context in which these institutions have a strong impact on entrepreneurship. I further suggest that all entrepreneurial activity is embedded, and thus subject to social obligations and constraints. In this context, I find that there are obligations related to collective support, whereas in a western context, obligations may be related to institutionalized expectations of growth. Regardless, a lack of contextualized understanding of constraints can result in ineffectual attempts to foster entrepreneurial behavior.

This study also contributes significantly to institutional theory, particularly as it relates to the effect of formal and informal institutions on entrepreneurship (Bruton et al., 2010). Prior work has suggested that informal institutions can substitute for formal institutions in contexts of poverty (Khanna & Palepu, 1997; Mair & Marti, 2009). Local entrepreneurs are thought to be able to leverage network ties in order to scale and diversify their businesses even where strong formal institutions do not exist (Estrin, Korosteleva, & Mickiewicz, 2013). These findings extend such insights by suggesting that informal institutions such as collectivism and fatalism embedded in the occupational identity of entrepreneurship can also significantly inhibit entrepreneurial growth and innovation. By enacting the entrepreneurial occupational identity, entrepreneurs in turn reinforced both the identity and the informal institutions of collectivism and fatalism.

Finally, my study contributes to the academic conversation surrounding institutions as enablers of occupational identities (Tolbert et al., 2011; Scott, 1995). Within any environment, multiple institutional forces influence individual-level behavior (Ostrom, 2005). Environments in which multiple institutional forces operate in a highly interdependent and mutually reinforcing manner are thought to be restrictive to change (Batjargal, Hitt, Tsui, Arregle, Webb & Miller,

2013). As my data suggest, the institutional forces shaping entrepreneurship as an occupational identity in rural contexts of poverty are often highly interdependent and mutually reinforcing, inhibiting the pursuit of innovation. However, my data also suggest that such institutional forces are not applied equally – ‘outsiders’ were not bound to the norms of community obligations. Thus, the occupational identity of entrepreneurs differed depending on their embeddedness.

Building on insights from strategic management that organizations with higher levels of uncommitted resources (slack) are more innovative (Nohria & Gulati, 1996), I propose that entrepreneurs who are less encumbered by multiple institutional forces that pressure towards conformity have ‘institutional slack’. Just as institutional entrepreneurs have more room to maneuver when institutional prescriptions are unclear or conflicting (Beckert, 1999), I argue that entrepreneurs with institutional slack are likely to be more innovative in the opportunities they pursue. Having greater institutional slack allows for a more malleable occupational identity, and more room for experimentation with new activities without immediate legitimacy threats. In building upon prior work by Glynn (2008), greater institutional slack allows for a more diverse ‘menu’ of identity elements from which entrepreneurs can select. Therefore, I define institutional slack as the degree to which prescriptions from multiple institutions are varied or weak as opposed to consistent and strong, allowing for degrees of experimentation without legitimacy penalties. To summarize, most entrepreneurs I interviewed felt consistent and mutually reinforcing institutional pressures on their economic decisions. However, despite consistent prescriptions from the religious and family institutions, under “outsider” conditions that relaxed the institutional obligations to community, entrepreneurs may have experienced more institutional slack and felt more freedom to innovate or grow their businesses.

My findings are subject to limitations. The patterns I observed in this inductive study were initial observations, not empirically tested. Nonetheless, several features of my design help to validate my findings, including an initial round of interviews and focus groups, as well as close contact with individuals with a deep understanding of the context. As an area of inquiry with relatively few well-validated constructs, an exploratory study was appropriate, however future research with quantitative data to test the theoretical insights identified herein would be an important next step. My study was also undertaken only in a single setting; that of rural Ghana. The informal institutions I identified in this context, collectivism and fatalism, may be specific to rural Ghana, but I do not believe so. Both are also consistent with the idea of island networks, as collectivism emphasizes the interdependencies of actors and fatalism is consistent with limits to external inputs – if things are always the same, one may believe they were meant to be that way. Yet, I cannot generalize my findings empirically beyond rural Ghana. I encourage other researchers to take seriously the notion of island networks in resource scarce contexts to see whether or not similar informal institutions exist in those contexts.

Returning to the practical problem that opened this paper, my findings also provide guidance for NGOs and others trying to stimulate entrepreneurship in contexts of poverty. Entrepreneurship is increasingly considered central to poverty alleviation efforts, with many development agencies pursuing market-based approaches to poverty alleviation (McMullen, 2011). My work provides a cautionary perspective that highlights the importance of contextual bridging (McKague, et al., 2015), or the need to ensure that interventions are customized to fit the context (Lutz, 2009), contrary to assumptions that interventions that are effective somewhere will be effective anywhere. This includes paying close attention to the role of local actors in intervention projects in contexts of poverty, whereas much of the extant work at the intersection

of entrepreneurship, institutions and poverty alleviation takes the perspective of development agencies. These agencies must be aware of the limitations of attempting to shoehorn in western conceptions of entrepreneurship, given the differential construction of the entrepreneurial identity in different social contexts. Within these contexts, assumptions that entrepreneurship will have a motivating effect and create the conditions for innovation can be misleading, as the entrepreneurial identity in some developing markets may in fact systematically oppress innovative aspirations both because of fear of social sanctions for achieving too much wealth, and because of the need to set aside funds that could otherwise be invested for growth for loans to relatives and other community members, which may or may not be paid back.

In addition to the “business templates” approach currently employed by many development NGOs, my findings also allude to the utility of providing “occupational templates”: scripts for alternative roles that entrepreneurs may play, such as agents of innovation, engines of economic growth, and creators of jobs. Recent work on cultural entrepreneurship also points to the potential power of a “defining collective identity story” (Wry et al., 2011), that may provide entrepreneurs in these contexts with an alternative set of core practices (what they do) which define the elements of their occupational identity (who they are). Taking a network perspective, it may also be helpful for NGOs attempting to foster entrepreneurship to be more strategic about where they work. Using a cluster approach may increase the potential to create an “occupational thicket”, which may facilitate the legitimacy of alternative practices more than isolated individuals in remote communities, though such an approach is less helpful when using a business templating approach instead of an occupational templating approach.

Efforts to stimulate innovative entrepreneurship without taking informal institutions into account may fail. Actors attempting to build innovative entrepreneurship in such contexts must

understand and navigate these informal institutional norms in order to remove institutional barriers and work with and within existing social structures, perhaps finding new anchors for desired behavior in existing institutional norms (Mair et al., 2012), or more explicitly using community norms to foster more community-based innovative entrepreneurship in such contexts.

In summary, this work provided novel insights into the question of how institutions shape entrepreneurial behavior, through the occupational identity, in contexts of resource scarcity and densely-connected, externally isolated island networks. Future research is needed, however, to better understand why these institutions remain so firmly entrenched, and how entrepreneurial actors may in turn alter the institutions that constrain them, or their responses to them.

**STUDY TWO: CHANGING PERCEIVED LEGITIMACY NORMS AND
BEHAVIORS IN CONTEXTS OF POVERTY: A FIELD EXPERIMENT ON THE
RELATIVE EFFICACY OF FRAME BRIDGING AND FRAME BREAKING
STRATEGIES**

ABSTRACT

Although institutions gain their strength through broad-based social agreement, institutional change begins at the individual level, with a shift in individual judgments surrounding what is considered to be appropriate, acceptable, and legitimate. Prior work suggests that this shift occurs as the mental models that individuals use to make decisions about their actions - or frames - change. Frames may be changed when correspondences or bridges are constructed between analogous or familiar schemas (frame bridging), or through a break or switch with a past frame (frame breaking). To understand the relative efficacy of these two framing strategies in changing perceptions and behavior, I test them in a field experiment conducted in rural Sri Lanka, where an entrepreneurship training program attempts to reframe entrepreneurship as innovation rather than replication. In so doing, I contribute to the literature on framing by identifying factors for predicting how and when a given framing strategy will resonate with its intended audience, as well as the microfoundations perspective on institutional change by explicating the relationship between framing, perception change and behavior change, as well as the entrepreneurship literature by shedding light on how individuals are most effectively motivated to identify and act on innovative opportunities.

INTRODUCTION

Strategies related to development often focus on changing social norms, or taken for granted patterns of thought and action, that inhibit individuals from engaging in a desired behavior (Mair, Marti & Ventresca, 2012; McKague, Zietsma, & Oliver, 2015). For example, microfinance changed lending practices from emphasizing individual- to group-level accountability, and from informal lending to institution-based savings and lending practices (Bruton, Khavul & Chavez, 2011; Hiatt & Woodworth, 2006; Khavul, 2010 Yunus, 2007). Education initiatives attempt to change social norms around the importance of education for girls (Banerjee, 2004; Banerjee, Glewwe, Powers & Wasserman, 2013). Health initiatives attempt to legitimize practices such as contraceptives and routine vaccines (La Ferrara, Banerjee, & Orozco, 2018). At the core of many of these initiatives is a change agent, or intermediary, actively attempting to alter what is considered normal, appropriate and legitimate among a group of individuals by legitimizing a practice or set of practices that previously had either been actively considered illegitimate or had achieved such a taken for granted status as to not to have been thought of at all (Kistruck, Beamish, Qureshi & Sutter, 2013; Mair et al., 2012; Mair, Wolf & Seelos, 2016).

Yet, by definition, institutionalized norms are intransigent, and in many contexts of poverty, where alternate templates are often scarce, institutionalized norms can be particularly resilient to change (Mair et al., 2012; Mair & Marti, 2009; Marti, Courpasson & Barbosa, 2013; Qureshi, Kistruck & Bhatt, 2016; Slade Shantz et al., 2018). Institutional change efforts by external actors or intermediaries often meet with significant resistance, and the difficulty of changing institutions can exceed the project budgets of such intermediary organizations' involvement (Khavul, Chavez & Bruton, 2013). Particularly, the translation from change in

institutional beliefs to behavior change is complex (Paluck, 2009). As a result, many initiatives that aim to change legitimated or routinized behaviors are unsuccessful in their pursuits (Hall, Matos, Sheehan, & Silvestre, 2012).

Although institutions gain their strength through broad-based social agreement (Scott, 1995), institutional change begins at the individual level, with a shift in individual judgments surrounding what is considered to be appropriate, acceptable, and legitimate (Tost, 2011; Bitektine & Haack, 2015). Prior work suggests that this shift occurs as the mental models that individuals use to make decisions about their actions - or frames – change (Werner & Cornelissen, 2014). Further, changes in individuals’ judgments about what is deemed legitimate constitutes a ‘micro-motor’ (Powell & Colyvas, 2008), which in turn guides behavior that may deviate from socially acceptable notions of appropriate actions (Mizruchi & Fein, 1999). Therefore, a change in legitimacy judgments can in turn result in a change in behavior as individuals decide to “break out” – that is, act in ways that do not conform to institutionalized routines and scripts (Lepoutre & Valente, 2012). The behavior of individuals can in turn and in time, coalesce back up to collective-level judgments, to constitute a new social reality (Barney & Felin, 2013; Felin, Foss & Ployhart, 2015; Tost, 2011).

Prior work suggests that individuals’ cognitive schemas or frames can be changed through a reframing process, whereby change agents access existing meaning structures – cognitive schemas – and then draw connections to other ideas and values (Douglas, 1986; Suddaby & Greenwood, 2005; Weber, Henze and DeSoucey, 2008) in order to incite rethinking and reconsideration of practices, and ultimately “talk alternative conceptualizations of an institution into being” (Werner & Cornelissen, 2014: 1450). According to the framing and schema change perspective, there are various different ways for an individual’s cognitive schema

to be changed (Benford & Snow, 2000; Werner and Cornelissen, 2014), of which two categories have received the deepest theoretical treatment. Frames may be changed when correspondences or bridges are constructed between analogous or familiar schemas – a strategy which I will refer to as frame bridging. In contrast, frame breaking relies on a break or switch with a past frame, and is based on the premise of counter-factual lines of argumentation, foregrounding dissimilarity or contrast, rather than similarity or correspondence (Werner & Cornelissen, 2014). The relative success of these two distinct strategies has been suggested to be determined based on the degree of frame resonance that each strategy achieves with the intended audience (Snow et al., 1986). Prior research suggests that the strategy that will be successful at achieving frame change will be determined by the stability or volatility of the extant current discourse (Werner & Cornelissen, 2014), or what has been referred to as the structure of the existing “discursive opportunity” (McCammon, Sanders Muse, Newman, & Terrell, 2007). Yet, there is a gap in research that explores the relative success of various reframing strategies in situations where no discursive opportunity structure exists, which likely requires identifying other mechanisms to predict successful reframing.

Extending this line of research, I offer and test competing hypotheses for which framing strategy will achieve sufficient frame resonance to change individuals’ schemas or frames and resulting behavior in a context where a change agent is among the first to begin a reframing conversation among a population – or what I refer to as a “pre-opportunity” stage. I anchor the logic of both framing conditions in the core insight from social psychological literatures that the first step of changing norms in a community is to change individuals’ perceptions of said norms (Tankard & Paluck, 2016). Therefore, in both conditions I was seeking to change the basic perception of individuals that the behaviors being taught (in my case, via an entrepreneurship

workshop) are legitimate, rather than changing the norm itself. I argue that frame bridging may be effective because it relies on borrowing from a domain that is natural, peer-based, culturally familiar, and congruent with existing institutional prescriptions from a different but proximate domain (Morris & Liu, 2015; Sieweke, 2014; Tost, 2011) via the use of “naturalizing analogies” (Douglas, 1986), making the new or target domain also appear conventional and familiar (Werner & Cornelissen, 2014), and therefore imitable (Sieweke, 2014). On the other hand, I hypothesize that a frame breaking approach may also be more successful at schema and behavior change. I argue that this may be successful by breaking fully with an existing or base schema of entrepreneurship as subsistence, and using counterfactual examples that aim to motivate through aspiration, differentiation and the affordance of higher status, which are recognized bases of legitimacy (Morris & Liu, 2015; Tost, 2011).

I test my hypotheses via a field experiment in partnership with a development organization in impoverished rural areas of south and central Sri Lanka. This organization seeks to foster entrepreneurial innovation among its beneficiaries by providing both financial and non-financial services. Prior work, as well as initial qualitative data collection and meeting with the organization, suggests that while basic entrepreneurial activity may be widespread in impoverished areas, the norms around entrepreneurial behavior often guide entrepreneurs in contexts of poverty to favor replication (i.e., subsistence-based activities that typically involve many individuals all offering the same goods or services to the same customers via the same processes) over innovation (i.e., the identification of opportunities for value creation through differentiation, albeit incremental) (Bradley et al., 2012; Gielnik et al., 2012). Further, that existing institutionalized norms reduced the perceived legitimacy of entrepreneurs engaging in behaviors that were more innovative (Slade Shantz et al., 2018). As a result, the organization was

interested in changing the perceived legitimacy of acting innovatively as an entrepreneur. Therefore, I designed an experimental intervention which involved creating two versions of an entrepreneurship training. Both trainings taught identical content – types of innovation, and the entrepreneurial process³ – but differed in the examples and cases that were used to help participants make sense of the materials, which were interspersed throughout the content, as well as interwoven throughout a series of ongoing exercises and meetings following the training. Given that schemas are changed through a framing process that involves the repeated pairing of related stimuli (Glaser et al., 2017), my goal was to provide reframing content that involved switching from an “entrepreneurship as subsistence” pairing to an “entrepreneurship as innovation” pairing, using two different framing strategies to identify which would be more resonant with participants. The frame breaking strategy was oriented around aspiration, featuring the use of highly successful exemplars, and the contrasting of such success stories with typical entrepreneurial outcomes. The frame bridging strategy was oriented around familiarity, featuring the use of mundane, everyday examples of innovation that are commonly used in non-business domains, transferring the legitimacy of such activities to the entrepreneurial domain. Quantitative data was collected at four points, including surveys and behavioral measures (via an “assignment” for participants to track the number of innovative actions they tried over a period of six weeks following the workshop and follow-up meeting). Collectively, results pointed to frame bridging as the more efficacious strategy for prompting behavior change, with a positive change in perceived “attractiveness” of innovative behavior (frame change) as the mechanism driving such behavior change. In the frame breaking condition, I also found a change in frame – but in this condition, the change was negative.

³ This content was based on the ABEL framework – Ask; Build; Experiment; Learn.

My research makes several contributions to extant theory. First, I contribute to the literature on framing, by identifying an important factor for predicting how and when a given framing strategy will resonate with its intended audience (Werner & Cornelissen, 2014). Specifically, while prior research has proposed that the most resonant framing strategy will be the one that best “fits” with the existing discursive opportunity, I extend this research into a context which features a relative absence of discursive opportunity to fit with. In such contexts, I foreground the importance of a reframing strategy that provides individuals with an incremental, attainable pathway towards the desired behavior. This in turn facilitates a contribution to a recognized gap in the microfoundations perspective on institutional change – namely, how do individuals’ judgments of what is legitimate change, how and when do these judgment changes precede a change in behavior, and whether personal belief or schema change is a required precursor to behavior change (Tost, 2011; Paluck, 2009a; Paluck, 2009b; Staub & Pearlman, 2009). Finally, these findings contribute to the entrepreneurship literature by shedding light on how individuals are most effectively motivated to identify and act on innovative opportunities in their entrepreneurial endeavors.

LITERATURE REVIEW

Entrepreneurship Interventions in a Development Context

One of the most promising development interventions of the last decade has been programs that focus on entrepreneurship training. Long recognized as a fundamental driver of economic development (Baumol, 1993; North, 1990; Schumpeter, 1934), entrepreneurship is an important tool for poverty alleviation in developing countries (Bruton, Ketchen & Ireland, 2013; McMullen, 2011). As a result, significant amounts of funding are being spent on initiatives that attempt to “teach” entrepreneurship. However, the outcome of such efforts has been largely

disappointing, with much of the resulting entrepreneurial activity being imitative rather than innovative (Gielnik, Frese, Graf & Kampschulte, 2012), and subsistence oriented rather than growth oriented (Alvarez & Barney, 2012). These distinctions are important because it is innovative, growth-oriented entrepreneurship that is considered key to sustainable economic development, whereas imitative, subsistence-oriented entrepreneurship typically creates rapid market saturation and economic rents that are quickly divided into trivial amounts as many entrepreneurs compete for the same small and geographically limited market (Bradley, McMullen, Artz, & Simiyu, 2012).

Prior work suggests that issues surrounding innovative opportunity identification and action are not only about entrepreneurship training, but also about changing institutionalized norms, practices, and role-based scripts and expectations around what it means to be an entrepreneur (Bruton, Ahlstrom & Li, 2010; Slade Shantz, Kistruck & Zietsma, 2018). For example, Slade Shantz et al. (2018) found that norms embedded in the occupational identity of entrepreneurs in an impoverished context emphasize aspects that block – rather than foster – innovative activities. Whereas in developed contexts, entrepreneurship is typically synonymous with innovation and growth, in developing contexts, norms that embed the legitimacy of entrepreneurs with behaviors such as sharing wealth with needy community members and sharing trade secrets with competitors make innovation and growth efforts challenging. This is in line with earlier work that highlights the detrimental effects of institutionalized norms on market-based development efforts (see, e.g., Evers & Mehmet, 1994; Mair & Marti, 2009). At a more general level, given that practices, routines and scripts are embedded in broader institutions (Labatut, Aggeri & Girard, 2012; Abdelnour, Hasselbladh, & Kallinikos, 2017), simply teaching such skills and practices without consideration of such institutional constraints, is at risk of

failing to achieve desired behavior change outcomes. As a result, economic development interventions designed to promote entrepreneurship increasingly attend to social norms and social structures (Mair et al., 2012; McKague et al., 2015), in addition to interventions related to formal market institutions, financial capital constraints, and skills training (Alvarez and Barney, 2013; Bradley et al., 2012; De Castro et al., 2014; De Soto, 2000; North, 1990), to achieve behavioral changes.

The Microfoundations of Institutional Change

From a sociological perspective, institutions are typically conceptualized as enduring social patterns of thought and behavior, and as such, they are commonly understood to be resilient to change (DiMaggio & Powell, 1983). Institutions are however able to be changed, when individuals act in ways that are deviant or nonconforming to institutional prescriptions (Lepoutre & Valente, 2012; Zietsma & Lawrence, 2010). Although early work primarily focused on isomorphic behavior (DiMaggio & Powell, 1983), recent institutional scholarship has seen a shift in theorizing to foreground the role of micro-foundational elements of institutional change (Powell & Colyvas, 2008; George, Chattopadhyay, Sitkin & Barden, 2006). This literature has focused primarily on how and when individual actors take actions to change institutions, which includes the literature on institutional entrepreneurship (Battilana, Leca & Boxenbaum, 2009), institutional work (Lawrence, Suddaby & Leca, 2009; Zietsma & Lawrence, 2010), and identity work (Leung, Zietsma & Peredo, 2013). Such research attempts to explain how actors are capable of acting agentially and purposefully to change institutions, despite the “iron cage” of institutionalized norms and beliefs (Bitektine & Haack, 2015; DiMaggio & Powell, 1983; Oliver, 1991; Scott, 2008; Tolbert & Zucker, 1996; Seo & Creed, 2002). Yet, in its emphasis on these actions as purposefully aiming to change institutions, and the downstream impacts of such

deviance on institutional change (Seo & Cred, 2002; Greenwood & Suddaby, 2006; Rao et al, 2003), much of this work has been relatively silent on the initial process that facilitates individuals' decisions to “detach from the prevailing prescriptions that comes with institutional nonconformity” (LePoutre & Valente, 2012:286). Importantly, this agency constitutes an “engagement with structure...irrespective of whether [such actors] change social structure” (Cardinale, 2018:134). In other words, this perspective teases apart the judgment and action of actors from such actors' effect on the social world – that is, the extent to which they ultimately “alter the rules, relational ties, or distribution of resources” (Scott, 2013: 94).

Thus, as a first step, institutional change involves both a decision, or change in mind, as well as a decision that taking nonconforming action is more attractive than continuing to engage in conforming action. A change in mind requires a shift in individual judgment of what's considered legitimate (Tost, 2011), or behavior that is “desirable, proper and appropriate within some socially constructed system of norms, values beliefs and definitions” (Suchman, 1995: 574). While legitimacy is typically conceptualized as an attribute that is a collective perception, independent of the endorsement of individual actors (Berger & Luckman, 1966), it is also conceptualized as being comprised of legitimacy judgments of individuals (Tost, 2011; Bitektine & Haack, 2015). Therefore, a change in legitimacy at the aggregate level starts with individuals changing their minds - from a determination that some action, practice, or belief is illegitimate – to legitimate, appropriate and attractive (Jepperson & Meyer, 2011). The content or base of such legitimacy judgments can be instrumental or pragmatic (i.e., – “this is an attractive option for me”) (Suchman, 1995); it may also be moral or prosocial (i.e., “this is good for society”) (Scott, 2001). Importantly, this change in individual judgment of legitimacy (“I think this is legitimate”) is distinct from an individual's perception that others judge something as legitimate (“I think

others think this is legitimate”), which is referred to as a “validity belief”, or a perception of the consensus opinion of legitimacy (Dornbusch & Scott, 1975; Tost, 2011; Bitektine & Haack, 2015; Zelditch & Walker, 2000).

As individuals form and reform such judgments, there are different modes through which individuals evaluate possibilities for change – evaluative and passive. In the passive mode, individuals are more likely to rely on existing decision-making heuristics and cues, often with the outcome of maintaining existing legitimacy judgments (Johnson, Dowd & Ridgeway, 2006), and will rely on such passive assessments to conserve cognitive energy, until the evaluative mode is triggered, which in turn engages a more reflexive, evaluative cognitive process (Kahneman & Frederick, 2002; Kahneman, 2017). This social psychological perspective is reinforced by recent work at the microfoundational level of institutional theory, which points to both a pre-reflective and a reflective dimension of agency (Cardinale, 2018a; b). This work questions whether action “within the space of enabled possibilities is still influenced by structure and, if so, through what mechanisms such influence operates” (Cardinale, 2018a: 133). In other words, agency consists of two dimensions: protention, which refers to a constraining pre-reflective engagement with structure, and project, which refers to an enabling, agentic engagement within certain constraints (Cardinale, 2018a).

Such a change in individuals’ judgments and perceptions is important because it constitutes the ‘micro-motor’ (Powell & Colyvas, 2008) that guides their behavior. Existing debates, however, question the precise pathway through which such influence occurs, or the interaction between perception (as in perceived norms/validity), personal judgments and beliefs, and behavior (Paluck, 2009). On the one hand, some research suggests that beliefs and behaviors are closely linked (Bargh, Chen & Burrows, 1996; Kawakami, Young & Dovidio, 2002) Yet, on

the other hand, work also suggests that behavior is more dependent on an individual's perception of social norms (Cialdini, Kallgren, & Reno, 1991; Miller, Monin, & Prentice, 2000) than their own personally held beliefs and judgments (Greenwald, Poehlman, Uhlmann & Banaji, 2009). For example, Paluck (2009) finds that behaviors (but not personal beliefs) were influenced by a change in perception about what was considered to be socially acceptable and legitimate. Ultimately (although not necessarily deliberately), such changes at the individual level coalesce into changes in collective-level structures (Tost, 2011). Yet, without a more robust and disentangled understanding of this first stage - that is, how individuals form new judgments about what is legitimate and attractive to them, as well as how and in what sequence (Paluck, 2009; Sieweke, 2014) this judgment affects their behavior, it is difficult to subsequently understand the effects at the collective level.

Framing and Schema Change

One way that a change in legitimacy judgment can occur is through a change in schema or frame, and as a result scholars are calling for increased attention to the role of cognitive schema or frame⁴ change in affecting action and behavior change (Thornton et al., 2012; DiMaggio, 1997; Glaser et al., 2017). DiMaggio (1997) emphasized the importance of cognitive schema, which he defined as “knowledge structures that represent objects or events and provide default assumptions about their characteristics, relationships and entailments under conditions of incomplete information” (269). Schemas are also described as cognitive structures or descriptive mental maps through which knowledge and information is acquired, processed, retained and organized (Wyer, 2004). Such maps are used to organize and encode associations around, as described by Elsbach, Barr & Gargadon (2005:422), person schemas (templates specifying how

⁴ Schema and frame are terms that are often used interchangeably in the literature, and will be considered synonymous herein.

certain individuals behave and think), role schemas (templates specifying the appropriate behaviors of individuals occupying certain roles), event schemas (the appropriate sequencing of common events), and rule schemas (specifying the relationships between certain types of actions, events or concepts). Such templates can help individual actors ascribe meaning to the world (Purdy et al., 2017). For example, the role of “entrepreneur” will be accompanied in individuals’ minds by a set of role expectations, or templates surrounding the behaviors of an individual with such a label. While cognitive frames are individual level constructs, they are typically reinforced via communication with others within a similar institutional domain, “most of whom have frames of reference similar to our own” (March & Simon, 1958: 152). In other words, frames form a central construct within neo-institutional theory (Beckert, 2010) given that they involve “the creation of shared conceptions that constitute the nature of social reality and the frames through which meaning is made” (Scott, 2003: 880), thereby connecting micro and macro levels of analysis (Cornelissen & Werner, 2014; Goffman, 1974; Werner & Cornelissen, 2014).

Such schema or frames can be formed when individuals repeatedly observe pairings of stimuli (Glaser et al., 2017; Wyer, 2004), and provide a vital mechanism to explain institutional change given that schemas can also be re-formed (Lounsbury et al., 2003), as new associations are formed that change understanding, meanings or conceptualizations (Lakoff, 1987). Schema change can be an expansion or elaboration (first order change) or a fundamental alteration (second order change) (Werner & Cornelissen, 2014), and this change can happen via framing or reframing.

Framing involves the selection of “some aspects of a perceived reality and efforts to make them more salient...to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation” (Entman, 1993: 52), which in turn guide

perception and representation of reality (Bateson, 1972; Purdy, Ansari & Gray, 2017). Framing involves a strategic process that aims to persuade, gain support, and legitimate change (Benford & Snow 2000; Kaplan, 2008; Polletta, 2006). As such, reframing often involves a new frame version challenging an existing meaning structure, by drawing associations to new ideas and cultural values (Douglas, 1986; Suddaby & Greenwood, 2005; Weber, Heinze & DeSoucey, 2008), in order to foster reconsideration of practices in a particular institutional domain (Werner & Cornelissen, 2014), through processes such as editing (Weber & Glynn, 2006) or framing contests (Benford and Snow, 2000; Rao & Kenney, 2008; Kaplan, 2008). For example, Rao, Monin and Durand (2003) illustrated a reframing process of French cuisine, which involved reshaping the meaning embedded in the role identity of French chefs from one of classical cuisine using institutionalized, imitative practices to nouvelle cuisine – a more autonomous, innovative and chef-driven set of practices.

Various reframing tactics have been proposed. For example, Snow, Rochford, Worden and Benford (1986) and Benford and Snow (2000) provide a set of four framing processes: bridging (linking “ideologically congruent but structurally unconnected frames”); amplification (emphasizing or embellishing existing values or beliefs); extension (i.e., moving beyond a primary set of interests to encompass “interests or points of view that are incidental to its primary objectives but of considerable salience to potential adherents” (472)); and transformation (breaking with old understandings and meanings and replacing them with new ones). Building on and adding theoretical precision to this typology, Werner and Cornellisen (2014) offer two discursive framing tactics, including frame shifting and frame blending. Frame shifting – most akin to Snow et al’s (1987) “transformation” – involves a more dramatic sensebreaking (Pratt, 2000) process that re-writes or reorganizes existing schematic associations into a new frame.

Such a process typically relies on a) contrasting or counter-factual language that compares old and new schema with an eye to marking differences between the two and emphasizes a “break” from the old (Goffman, 1974); b) “analogical mappings between actors and activities in similar but counterfactual scenarios” (Werner & Cornelissen, 2014: 1456); and c) disjunctive language that creates negation or doubt around the old, often in a way that highlights the need for change (Werner & Cornelissen, 2014).

Frame blending – most similar to Snow et al’s (1987) “bridging” strategy – relies on the combination of two separate schema that share some structural properties (Coulson, 2001; Fauconnier & Turner, 2002). Rather than emphasizing difference or contrast with an existing schema, such a strategy draws attention to shared elements across two schema that can be married, or the incorporation of one schema into another. This tactic also emphasizes alignment and integration, with the aim to create something novel and hybrid with familiar elements of both (Turner, 2001). Such a strategy may be most well suited to situations where competing sets of cultural beliefs (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011) underlie schema differences, because in such circumstances, an opportunity to frame such differences “in an integrated manner and to circumvent the dilemma of alternative and competing schemas” (Werner & Cornelissen, 2014: 1457) may be preferable to calling attention to such schisms. This tactic may usefully employ the familiar as a bridge to the unfamiliar, importing familiar discourse from existing schema and blending this with the unknown from alternate arenas (Hirsch, 1986), thereby circumventing dilemmas surrounding clashes with alternative and competing schemas.

In summary, this perspective foregrounds the role of reframing, through appropriate discourse and rhetoric, as microfoundational to processes of institutional change. Yet, gaps

surrounding how to “craft content for institutional change that resonates” (Tost, 2011), or achieve frame salience or resonance (Snow et al., 1986) among a desired audience, remain. Moreover, an understanding of which framing strategy works more effectively to change both mind and behavior, particularly at the pre-opportunity stage, is lacking (Werner & Cornelissen, 2014).

HYPOTHESES

As described above, the dominant schema regarding entrepreneurship in many development settings is that entrepreneurs equate entrepreneurship with emulation or imitation. Therefore, the desired schema change in this study involved a change in judgment about what was considered legitimate behavior in such a role, emphasizing the legitimacy of experimenting with novel or differentiated aspects of one’s enterprise, and ultimately a change in behavior, whereby entrepreneurs will experiment more frequently with innovative modifications to their business (my dependent variable of interest). Herein I focus my theorizing on two of the most conceptually elaborated reframing tactics – frame bridging and frame breaking. Prior work provides ample argumentation as to why either frame bridging or frame breaking tactics may be most effective at initiating such schema change, depending on the attributes of the existing discourse. Both conditions are anchored in the logic that the first step of norm change is the change in individuals’ perceptions of the legitimacy or attractiveness of such norms – therefore my aim in each condition was to change the perceptions of individuals that the behaviors being promoted through the entrepreneurship workshop were legitimate. Both rely on a logic of validity, referring to the extent to which the decision maker perceives that external consensus has been reached on the legitimacy of a behavior (Tost, 2011). In both cases, the evaluator receives signals that the desired behavior – innovation – is legitimate, and each condition provides

templates or examples to emulate, given that mimesis is one of the foundational elements of institutional theory (Sieweke, 2014). Yet, they differ in the nature of the templates provided for emulation, and therefore the nature of each reframing approach is distinct. Because prior work provides theoretical rationale for why either may be effective, below I detail my competing hypotheses.

Reframing Cognitive Schema of Entrepreneurship through Frame Breaking

In the frame breaking condition, my theoretical rationale for why this reframing approach will be most effective at changing both mental frame and behavior is based on a logic of aspiration, taking three main points into account. First, this strategy relies on breaking fully with an existing schema of entrepreneurship as subsistence, and using counterfactual sensegiving examples which highlight that the novel entrepreneurial behavior promises higher status, differentiation, and societal importance, all recognized bases of legitimacy (Tost, 2011). Morris and Liu (2015) review the costs and benefits of adhering to the norms of aspirational groups. For example, even at a cost of giving up personal aims and opinions, individuals often find meaning and purpose in adhering to standards set by the elite or higher class, such as in the case of professions or strong corporate cultures (Scott, 1987). In addition to meaning and purpose, emulating aspirational models can bring more tangible rewards such as financial success, as people gain status in the eyes of others because they are assigned value based on association with the high status individuals whose practices and scripts they are emulating (Henrich & McElreath, 2003). Individuals will likely have low levels of identification with such aspirational figures, and rather will imitate practices of such high status individuals because of the instrumentally valued outcomes of doing so (Amabile et al., 1994; Tost, 2011).

In addition to such instrumental and rational motives, social psychological research also suggests that individuals in high status and high power positions (such as the government or celebrities) have an important effect on the extent to which lower powered actors perceive that others find an action or perspective to be legitimate (Tankard & Paluck, 2017; Gould, 2002; Muchnik, Aral & Taylor, 2013). For example, Tankard and Paluck (2017) find that institutional decisions (such as the anticipated outcome of a court case) altered the perceptions of social norms (around public support for gay marriage) because individuals take their cues around social norms from individuals and organizational actors that are considered expert, representative of broad opinion, a recognized source of authority, or publicly visible. Therefore, in this case, the legitimacy is conferred by referents who have achieved success, status and wealth, and are therefore considered desirable to emulate. At the same time, however, the referents used in the examples have lower levels of familiarity and relatability.

Finally, it is possible that in the frame breaking condition, the emphasis on contradiction, contrast and difference (rather than similarity) puts individuals into an active processing mode or mindset that is more receptive to reconsideration and change, as compared to relying on or reverting to the status quo, which is a more passive mode. In a passive mode, individuals rely on cognitive shortcuts or assume the legitimacy of existing arrangements (Khaneman & Frederick, 2002). By contrast, an active, questioning processing mode is triggered by a “mental alarm” when a strong mismatch occurs between the established collective validity and new incoming information (Tost, 2011). In active mode, individuals are less likely to apply institutionalized judgments, and are generally more likely to be receptive to change (Bitektine & Haack, 2015). Prior research also suggests that frame change is more likely to occur when individuals are urged into an active or evaluative mental processing mode (Bitektine & Haack, 2015; Tost, 2011;

Ullsperger, Volz & Von Cramon, 2004), for example via a “jolt” or contradiction (Battilana, Leca & Boxenbaum, 2009; Greenwood, Suddaby & Hinings, 2002; Seo & Creed, 2002; Tost, 2011), such as a breaking approach may facilitate. A bridging approach, in contrast, may not provide a strong enough contradiction or jolt to shift an individual into such an evaluative mode. Based on these considerations, I suggest that frame breaking may be a highly effective strategy to changing the mental frames that guide individuals’ behavior, and as a result, to changing the behavior as well. More formally, I hypothesize that:

H1a: A frame breaking approach will result in more innovative entrepreneurial activities tried, as compared to a frame bridging approach.

H1b: This effect will be mediated by a positive change in frame about the legitimacy of innovative entrepreneurial activities.

Reframing Cognitive Schema of Entrepreneurship through Frame Bridging

On the other hand, in the frame bridging condition, the sensegiving discourse – that is, the examples, stories and thought exercises discussed in the training and subsequent meetings – all centered around the core message that innovation, differentiation and experimentation are all behaviors that are not only legitimate, but highly desirable and socially sanctioned in other (non-market) domains of social life. In other words, this tactic made ample use of analogies, or a structure-mapping between a known domain (also referred to as a base or source domain) and a novel domain (also known as a target domain), the closeness of the domains, and the use of salient peer referents as models.

The effectiveness of bridging analogies relies on three dimensions. First, that the base domain is natural and culturally familiar, and relatively proximate to the target domain. In my

case, the base domain was the family/household, which is considered proximate, relatively speaking, to the business domain given that small businesses are often run from the home, with family members, and with blended finances. This is important in legitimacy judgments because evaluators are strongly influenced by cues they perceive from their immediate or peer environment (Bitektine & Haack, 2015; Morris & Liu, 2015). Second, that the behavior change advocated in the target domain was congruent with institutional prescriptions from the base domain. Third, that the discursive sensegiving continually foregrounded salient and similar dimensions between the base and target domain, and the iteration between them (Glaser, Fiss & Kennedy, 2016), making the behavior in the target domain also appear conventional and familiar (Werner & Cornelissen, 2014) and therefore providing a path to imitate such behavior in the target domain (Sieweke, 2014). As summarized by Tost (2011), “To the extent that an emergent institution can be constructed in such a way as to be compatible with existing institutions, the evaluation (and implied challenge)...is less likely to occur, and so the emergent institution can begin to accrue the immunity to questioning that is cognitive legitimacy” (693). In other words, the power of bridging as a framing tactic is in its compatibility with existing institutions, and therefore the novel behavior is rendered less subject to scrutiny, because it uses the familiar as a bridge to the unfamiliar. The familiarity is enhanced when the analogies are based on the behavior of people who are much like them in the base domain, increasing their ability to relate to the experiences of those in the examples.

Implicit in this familiarity is the idea of attainability, because individuals are able to draw legitimacy cues from the peer-based similarity of the examples, and therefore identify an attainable pathway to emulation. Prior studies suggest that actors are more likely to imitate others who are more similar to themselves (Sieweke, 2014). Such imitative tendencies based on

homophilic or peer-based affiliation have been demonstrated, for example, to increase the efficiency of cultural learning (Boyd & Richerson, 1987), and for career role modeling (Karunanayake & Nauta, 2004; King & Moulton, 1996; Zirkel, 2002). Morris and Liu (2015) review the drivers of adherence to peer-based (as compared to aspirational) norms. For example, lateral (versus vertical) orientation towards peer norms provides individuals with a sense of self-identity and solidarity (Merton, 1957), particularly when upward mobility opportunities appear limited (Kanter, 1977). From a social identity and cultural psychology perspective, imitating peers heightens social and cultural identity (Tajfel & Turner, 1986; Terry & Hogg, 1996; Wan, Chiu, Peng & Tam, 2007) and consensual validation (Chiu, Morris, Hong & Menon, Fu et al., 2007), and avoids the possibility of social sanctioning for deviant behavior (Yamagishi, Hashimoto & Schug, 2008). Individuals will imitate peers in this way for reasons related to belonging, identification, and meaning (Amabile, Hill, Hennessey & Tighe, 1994). On the other hand, prior work has demonstrated that when individuals cannot see themselves in the templates and messages that clarify the normative prescriptions surrounding them, both performance and mental well-being suffers (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012; Stephens, Townsend, Markus, & Phillips, 2012). For example, Stephens et al. (2012) suggest that when first generation students go to college, they may feel disoriented and respond to this by falling back on practices and routines from familiar (peer) working-class norms. Reliance on peer norms may in the short term provide a sense of affiliation, social identity and solidarity, but in the long term, adherence to such achievable peer norms rather than aspirational “stretch” norms may hinder individuals’ ability to transition to higher status and power positions (Morris & Liu, 2015; Stephens & Townsend, 2015). In summary, the bridging condition’s strength relies on legitimacy conferred by highly salient peer referents. The consensus opinion of legitimacy stems not from

actors with high status, power, or authority, as in the frame breaking approach, but from the familiarity or relatability of the referents. Based on these considerations, I suggest that frame bridging may also be an effective strategy when the goal is to change individuals' mental frames and the behavior that is driven by these frames. More formally, I hypothesize that:

H2a: A frame bridging approach will result in more innovative entrepreneurial activities tried, as compared to a frame breaking approach.

H2b: This effect will be mediated by a positive change in frame about the legitimacy of innovative entrepreneurial activities.

FIELD EXPERIMENT METHODOLOGY

Experimental Design and Sample

The setting for my study included impoverished rural and semi-rural locations in central and southern Sri Lanka, a small South Asian island nation in the Indian Ocean with a population of approximately 20,000,000 people. The GDP per capita in Sri Lanka ranks within the bottom fifty percent of the world (CIA factbook, 2018), although this number has climbed in recent years. Additionally, Sri Lanka currently ranks in the “high human development” category based on the Human Development Index⁵ (HDI), with a score of .77, and a ranking of 76 out of 189 countries and territories. This represents an increase of 23 percent since 1990 (UNDP 2017 Human Development Report).

Moreover, Sri Lanka's entrepreneurial ecosystem relies on a reasonably strong economic infrastructure. According to the annual Global Entrepreneurship and Development Index, in 2018 Sri Lanka ranked highly on market-based variables such as Gross Domestic Expenditure on

⁵ HDI is a summary measure that assesses long-term human development dimensions, including life expectancy, years of education, and standard of living.

Research and Development⁶ (GERD), urban domestic market size, exporting potential, and level of expenditure on education and business training. Yet, it ranked very low on individual “entrepreneurial attitude” variables that are established drivers of innovative behaviors such as risk acceptance, cultural support, opportunity (vs necessity) orientation, and growth aspirations (GEDI, 2018).

For these reasons, Sri Lanka appeared to be an ideal country in which to test improvements to entrepreneurship training in ways that capitalized on the strong national infrastructure by strengthening the entrepreneurial attitude. To do so, I partnered with the NGO of a Canadian cooperative bank – Desjardines International Development (DID) – seeking to strengthen Sri Lanka’s cooperative banking sector. At the time of the initiation of the partnership, DID had just received a large grant to begin its operations in Sri Lanka, which included the provision of both financial and non-financial support to entrepreneurs in Sri Lanka. The project was conducted in partnership with an umbrella organization for cooperative banks – SANASA – and 54 of their strongest “primary societies” (PS), or autonomous cooperative bank branches falling under the umbrella organization. Under the auspices of the project, each PS was to receive training to strengthen both the PS’s themselves (governance, best lending practices, portfolio management, etc.), as well as training for its members, many of whom were small-scale entrepreneurs. This training was provided as a component of the non-financial member training.

Upon an extensive round of initial interviews with DID executives, a number of PS managers and staff, member entrepreneurs, and several individuals involved in entrepreneurship training through other programs, I learned that there was a strong appetite for entrepreneurship training. Although these interviews and focus groups were informal, they gave me a better

⁶ GERD is the R&D percentage of Gross Domestic Product (GDP) as reported by OECD.

understanding of the local entrepreneurial culture, current best practices in entrepreneurship training in Sri Lanka, DID's intended programming approach, and the dynamics of the relationship between DID, SANASA, the PS's, and their members. These testimonies also reinforced the picture painted to me in the numbers describing the Sri Lankan entrepreneurial landscape. From the perspective of the PS managers, many lamented a "supply-side" issue - that they had a hard time finding innovative entrepreneurial ventures to invest in. On the part of the entrepreneurs, there appeared to be a reticence towards trying new things with their business, but an eagerness to receive entrepreneurship training.

After these community visits and follow-up discussions with DID managers, I designed a field experiment to test the relative effectiveness of two different versions of an entrepreneurship training. More specifically, I wanted to embed in the entrepreneurship training a re-framing strategy that would a) change individuals' perception of the legitimacy of acting innovatively in business, rather than simply emulating what others are doing; and b) see whether changing their perceptions regarding the legitimacy of this behavior would actually change their behavior, by increasing the number of innovative activities they tried in their business.

To do so, I created a protocol and script for a half-day entrepreneurship training workshop that began with examples and exercises around the different types of innovations (product, process, and marketing innovation), and then moved into the process of innovating in one's business following the Ask/Build/Experiment/Learn (ABEL) framework. The objective of this was to provide these materials to the entrepreneurship trainers⁷ who had been hired for this purpose, to ensure a standardized delivery of the materials. The content of the training was identical in the

⁷ The five entrepreneurship trainers hired for these purposes were selected from a pool of International Labor Organization (ILO) Start and Improve Your Business-accredited candidates, broadly considered to be the gold standard in entrepreneurship trainer certifications.

two conditions. What differed across the two conditions were the examples and cases that were used to help explain the materials. Such examples were interwoven throughout the content and a series of ongoing exercises and meetings that followed the workshop. As described above, my goal was to provide reframing content that involved switching from an “entrepreneurship as subsistence” pairing to an “entrepreneurship as innovation” pairing, using two different framing strategies to identify which would be more resonant with participants. The frame bridging strategy was oriented around familiarity and attainability, featuring the use of mundane, everyday examples of innovation that are commonly used in non-business domains, in order to transfer the legitimacy of such activities to the entrepreneurial domain. The frame bridging condition drew each of its examples from a story about a local family and the innovative things they try in their family life. As an example of product innovation, the training pointed to the family trying to avoid contracting mosquito-borne dengue in their home by burning freely available waste coconut husks. In contrast, the frame breaking strategy was aspirational in its messaging, through the use of two successful entrepreneurs as exemplars consistently used throughout the training, contrasting the various successes of these individuals with typical entrepreneurial outcomes. These two versions of the training were then randomly assigned across the 54 PS’s, with 361 members in 27 PSs receiving the frame bridging version of the training, and 322 members in 27 PS’s receiving the frame breaking version, for a total of 683 individuals receiving the initial training workshop. To avoid any effects being attributable to the individual trainers’ specific capabilities, or “trainer effects”, each trainer was assigned an equal number of each version. To ensure the random assignment worked effectively, I collected a series of baseline measures on key variables (e.g., gender, prior entrepreneurship training, income, level of education, marital status, socioeconomic status), and found them all to be nonsignificant, as

expected. In this process I realized that randomization did not effectively randomize two demographic factors – age ($t=2.215$, $p=.027$) and the individual’s regional travel ($t=-2.109$, $p=.035$). I felt that these two variables may have had the potential to affect my results – for example, older people may have been predisposed to the bridging condition because they are more cautious around major changes; conversely, travel may make individuals more open to a breaking-oriented reframing. Therefore, these two items were controlled for in my models.

Intervention Procedure and Data Collection

My intervention began with a “train the trainer” session with the five entrepreneurship trainers that would be conducting the training. Over a 5-day period, I iteratively worked between the initial training materials we’d created and feedback from the trainers to ensure that both the content and the examples were appropriate and relevant, and the exercises were sufficiently dynamic to maintain participants’ interest. After an initial pilot, identified several areas for improvement, and modified the materials accordingly. At the end of the five days, I watched each of the trainers deliver the full training to PS members in both the central and southern regions to ensure that the modifications were sufficient. This lengthy process of co-designing the content and materials was critical to ensure that there was sufficient buy-in from the trainers who would ultimately deliver the content.

The training workshops occurred between July 4, 2018 and September 17, 2018. Either a DID field officer or a research coordinator was present for the first two trainings (one of each condition) each of the trainers conducted, as well as a random selection of subsequent workshops, to ensure that the sessions were consistently conducted as per the research protocols. Each training workshop lasted approximately half a day. A baseline survey was administered

before the workshop began to collect demographic data on the participants, and another survey was administered at the end of the workshop as a manipulation check, i.e. to ascertain whether there was a difference between the two groups with regards to how normal or typical innovation is in their community. Using a three-item cognitive legitimacy scale, I found, as expected, that the bridging condition reported significantly higher on this scale ($M=3.698$) than the breaking condition ($M=3.277$) ($p=.000$). Individuals were also provided with a workbook to take home. The workbook included a series of four exercises, and copies of the powerpoint slides used in the workshop as a reference. The exercises in the workbooks were condition-specific, referring back to the examples that had been used to “bridge” or “break” the existing entrepreneurial frame, as a way to reinforce the intervention in the minds of participants. Participants were asked to complete the exercises as a homework assignment over the subsequent two weeks. In each condition, the exercises began with a case study and questions about the case, and then became increasingly specific to the participants’ own business, while still referencing the examples from the workshop. During this two-week time period, participants received weekly condition-specific text message reminders about their homework, as a further reinforcement of the materials. Trainers also called participants at least once to see if they had questions and to encourage them to work on their workbooks. At the end of two weeks, a follow-up meeting was scheduled to discuss the workbook assignments and review the materials. At this meeting, a survey was administered to provide a starting point to assess the change in mental frame that I hypothesized would begin to occur once the workshop and exercises were completed. Additionally, at this meeting the group discussed the workbook assignments and reviewed the materials via a large laminated poster, which was given to the PS, with the suggestion that they put it up in the reception area of the PS as a conversation-starter about innovation. A final homework

assignment was also provided. This final exercise was designed to flow from the fourth workbook exercise, which was to come up with a plan to experiment with at least two of the innovative ideas they had generated through the workshop and earlier workbook exercises. In this final phase, I asked them execute on these plans – in other words, to actually implement some of the innovative ideas they had generated throughout the process. Additionally, I asked them to record on a form each innovative activity they tried over the course of the subsequent six weeks. A condition-specific participation gift was also provided at this point. The gift, a reusable cloth shopping bag, was meant to generate discussion between the participants and other members of the community.

In the final phase – the subsequent six weeks following the first follow-up meeting – members again received weekly condition-specific text message reminders to complete their assigned task of completing their innovation record. This phase culminated in a final meeting, in which individuals completed a final survey in order to obtain an endline measure for my change in mental frame, handed in their innovation forms, and engaged in a group discussion about the innovations they tried, and were provided a certificate of completion.

Table 3: Data Collection

Time	T1: Beginning of workshop	T2: End of workshop	T3: First follow-up meeting	T4: Second follow-up meeting
Survey	Demographic survey	Manipulation check	Baseline for anticipated frame change	Endline for anticipated frame change Innovation record sheets

The final analysis was conducted on all individuals who completed the training in its entirety. This means that they both attended the workshop and turned in a completed workbook at the follow-up meeting. Given that I was attempting to change individuals' frames, and that this happens through the *repeated* pairing of stimuli (Glaser et al., 2017), I designed a multi-phase treatment with each phase of the treatment building on the next. If they attended, for example, the workshop, but did not complete the exercises, they would have been initially exposed to the reframing, but would not have had the opportunity to put the new frames to use. For these reasons, I considered the intervention to have been completed only in individuals who completed the entire program (n=303).

Measures

Mediator: Change in Perceived Attractiveness of Innovative Business Activities. Given that my aim was to change or reframe the schema surrounding innovative business activities, I felt that a variable that tracked the change over time of participants' perceptions of how attractive innovative entrepreneurial activities was for them reflected a change in legitimacy perception, and was an important precursor to behavior change. I therefore asked the question, "Pursuing an innovative entrepreneurial opportunity is an attractive option for me" (Ajzen, 1991;

Krueger, Reilly & Carsrud, 2000), at both the first follow up meeting at week two and the second follow up meeting, six week later, at week eight. Respondents were asked to rate the extent to which they agreed with the statement on a five-point Likert scale (1=“Strongly Disagree”, 5=“Strongly Agree”). A “change in perception” variable was then calculated by subtracting the response at week eight from the response at week two.

Dependent Variable: Frequency of Innovative Behavior. To measure frequency of innovative behavior, as described above, I asked individuals to complete an innovation record sheet after every innovative action they undertook in their business. These were then tallied to create a count variable of innovative actions undertaken during the six weeks following the first follow-up meeting.

RESULTS

Table 4 displays summary statistics and correlations for the variables of interest, as well as for additional descriptive data. Table 4 also shows statistically significant correlations between “frequency of innovative behavior” (FIB), treatment condition, and “change in perceived attractiveness of innovative behavior” (CPA).

Table 4: Descriptive Statistics

		Mean	S.D.	Min	Max	1	2	3	4	5
1	Condition	.48	.50	0	1	1				
2	Frequency of Innovative Behavior	11.45	5.989	1	22	-.106	1			
3	Change in Perceived Attractiveness	.017	.804	-4.0	3.0	-.18**	.147*	1		
4	Age	46.66	11.179	20	77	-.11	.042	-.048	1	
5	Region	1.93	1.457	1	7	.101	.125	.056	.083	1

** p<0.01, * p<0.05; n= 303 Breaking=1; Bridging=0

I began by testing my main effect (competing) hypotheses (H1a and H2a). Knowing that I needed to control for age and regional travel, I first ran a regression of the condition (the IV) on frequency of innovative behavior (the DV), controlling for these two factors, and found this relationship to be significant ($p=.038$). I then conducted an independent t-test of means, and in support of H2a, I found that individuals who received the frame bridging training (coded as “0”) had a higher frequency of innovative behaviors ($M=12.02$, $SD=5.867$), than those who received the frame breaking training (coded as “1”) ($M=10.75$, $SD=6.098$). Model 1 in Table 5 summarizes these results.

Table 5: Analysis Results for Frequency of Innovative Behavior and Change in Perceived Attractiveness

Variables	Dependent Variable (DV): Frequency of Innovative Behavior	
	Model 1	Model 2
Breaking vs Bridging (Condition)	-1.687* (.807)	-1.556+ (.831)
Change in Perceived Attractiveness		.938+ (.503)
Age (Control)	.006 (.035)	.014 (.036)
Regions (Control)	.563* (.269)	.559* (.272)
Constant	10.848** (1.818)	10.419** (1.831)
F	2.701*	3.172*
R ²	.036	.039
Observations	223	216

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.10 Breaking=1; Bridging=0

I followed this main effect analysis with my mediation analysis. H1b and H2b hypothesize that the relationship between the condition (frame breaking vs bridging) and frequency of innovative behavior (FIB) is positively mediated by a change in perceived attractiveness of innovative behavior (CPA). To test the indirect effect between the intervention and FIB, I employed PROCESS mediation model 4. Using a 95% bootstrapping confidence interval I find that (LLCI: -.7097, ULCI: -.0146), which does not contain zero, providing support for mediation (Hayes, 2013). I also find that CPA is positively associated with FIB (p=.064) (Model 2). Further, I found that in the bridging condition, the mean CPA was a positive change (M=.151), and significant (p=.006), in support of H2b. However, in the breaking condition, the mean CPA was negative (M=-.142), therefore I do not find support for H2a. In other words, in

the breaking condition, opposing what prior theory would predict, I find that individuals perceive innovative activities to be less attractive over time rather than more attractive.

DISCUSSION

In settings such as impoverished rural Sri Lanka, entrepreneurs' actions are typified by emulation of others. Acting innovatively or even engaging in small experiments can be seen, therefore, as a form of institutional deviance (Slade Shantz et al., 2018; Bradley et al., 2012). In this study, I provided individuals with training in how to engage in entrepreneurial innovation and experimentation. More importantly, I also provided templates for individuals that were intended to reframe the norms, scripts and practices embedded in the entrepreneurial occupation, from emulation to experimentation. I tried to do so in two different ways – in one group, I provided sensegiving examples through frame bridging analogies that relied on normality and familiarity, and in the other group the sensegiving examples were oriented around frame breaking counterfactuals that relied on aspiration (Werner & Cornelissen, 2014). My findings reveal that, when being asked to engage in such acts of institutional deviance, and in the absence of existing discourse about the domain, the individuals in my study responded more favorably – that is, they changed their behavior more – to frame bridging messages than to frame breaking messages. This change in *behavior* was at least partly explained by a change in *perception*. In other words, the mediating mechanism I identified was a change in the perceived legitimacy of acting innovatively. In the frame bridging condition, this change was positive, yet in the frame breaking condition, contrary to what extant theory would suggest, the change was negative.

As reflected in my competing hypotheses, there was ample extant research to support the relative effectiveness of both frame bridging and frame breaking tactics as being most effective

at fostering a change in behavior. The frame breaking tactic provided successful and high-powered examples that provided clear, entrepreneurship domain-specific templates that individuals could seek to emulate in their own businesses, much like most entrepreneurship training. The frame bridging tactic, on the other hand, provided other (domestic) domain analogies that were familiar and relatable, despite being unrelated to business. Significant prior work has focused on how individuals change their actions and behavior in order to actively change institutions (e.g., institutional work, practice work, institutional entrepreneurship) (Greenwood, Oliver, Lawrence & Meyer, 2017). In this work, I take a step back, to suggest that an important precursor to this change in individual *action* is a change in *mindset*. My results suggest that having a familiar template was critical to changing behavior because it provided an attainable – and therefore imitable – model, which facilitated a change in how legitimate my participants perceived this behavior change to be. In other words, the power of the frame bridging examples was in their attainability. The familiarity of the examples presented individuals with an achievable mental pathway from the current state towards the desired behavior, which provided the necessary encouragement as individuals made incremental steps towards the new behavior. It also demonstrated that success was not binary, but that there may be varying degrees of success or attainment of the new behavior. Importantly, the frame breaking tactic also facilitated a change in legitimacy judgment. However, in this case, the change was not only a less positive increase than the other condition – this tactic actually created a *negative* change in individuals’ minds about the attractiveness legitimacy of this behavior for them. This suggests that motivational role models can in fact be *too* aspirational, which can hinder an individual’s ability to “see the path” to similar achievements, which may in turn preclude the desire to even try to get part way up the path. These findings make sense when put into the

context of a discourse that is in the pre-opportunity stage, as discussed above. Whereas prior work has emphasized a fit with the current discourse around a given topic, here I test reframing strategies in a context where there is no current discourse to fit a new conversation into. In such a situation, a framing strategy that emphasizes attainability, and the aspects of a behavior that are familiar and relatable, are more likely to show people a path towards a new set of norms and behaviors than one that emphasizes great leaps into a highly desirable but unknowable future. This may be the case because in the absence of an existing “conversation” about the path, it becomes more difficult to even conceptualize what the journey along the path should look like, and therefore having a familiar starting point and incremental or attainable steps is important.

These findings are important because frame breaking tactics appear to predominate in entrepreneurship training, though my findings that such approaches can actually have a detrimental effect. Motivational tools such as role models, gurus and success stories proliferate, accompanied by messaging that highlights the differences between such aspirational figures and those who aspire to be like them. These findings are not just relevant to impoverished Sri Lankan micro-entrepreneurs – this approach is equally prevalent in North American business school pedagogy. Case studies, textbooks and examples often feature such aspirational figures as Bill Gates and Mark Zuckerberg. Yet, my results suggest that such an approach may in fact be damaging. Consider an aspiring young entrepreneur with Bill Gates in her mind as she tentatively begins the steps towards entrepreneurship. At each step – and misstep – she is likely to be reminded of just how far from Bill Gates she is, and may therefore be more discouraged than if she has other – perhaps more familiar and attainable – stories to emulate. These stories may give her a familiar anchor, and illuminate a pathway to move in a forward direction, encouraged by her successes rather than discouraged by the contrast between herself and distant

role models. These findings may be particularly germane to non-traditional or minority entrepreneurs, such as women and ethnic minorities. Such entrepreneurs may be caught in a double bind, whereby not only do financiers and other resource providers not have their own mental models of women or ethnic minorities as high growth entrepreneurs, affecting their access to resources, but these entrepreneurs themselves may have few models to emulate that are familiar, relatable, and attainable. Of course, these findings remain to be tested in other contexts and with other groups, and it may be that, given that in a North American context innovation has an existing discursive opportunity structure that a reframing strategy should fit within, a frame breaking approach may be more effective.

It's also important to note that these effects were found in changing a behavior that was considered counternormative. These findings may have been different if I was trying to change a behavior that was considered appropriate and legitimate, but the behavior was not being adopted for other reasons. For example, some social or government interventions attempt to promote financial savings, healthy eating, or exercise. These behaviors do not run counter to existing norms, yet many interventions fail to achieve such desired behavioral modifications. Individuals do not adopt these behaviors for a wide range of other reasons. In such instances as these, a frame breaking approach may have been more appropriate, because these behaviors are already widely accepted, and therefore a wide range of pathways towards such goals are likely to be available in individuals' minds. In these types of examples, social psychological and behavioral science research is increasingly lauding the power of "nudge"-based interventions (e.g., Thaler & Sunstein, 2008), yet less is understood about how to frame such nudges for maximum influence. This research can inform such important avenues of research, yet simultaneously this highlights one of the limitations of the study-I am not able to speak to the relative effectiveness of a frame

bridging versus a frame breaking approach in the case of normatively legitimate behavior change. This provides a fruitful avenue for future research that could build from and extend these findings. Another area for future research that this highlights is whether there may be a sequencing aspect to framing strategies. For example, while frame bridging may help individuals *begin* to see the path towards innovative entrepreneurial behavior, over time and with some successes, aspirational models might help them to achieve higher levels of innovation.

Finally, while I situate this work in the microfoundational literature, the study only looks at one side of the well-known “Coleman bathtub”. This model suggests that social facts or institutions (macro) create the conditions of individual level action (micro), which in turn guides individual behaviors (micro), which in turn shapes social outcomes (macro), which subsequently influence social facts/institutions (macro) (Coleman, 1990; Felin et al., 2015). Within this model, this work focuses on micro-level responses to macro-level constraints, by exploring individual perception and behavior change that runs counter to existing normative prescriptions. This work stopped short of understanding how these individuals – adopting these new behaviors – may have influenced others around them, and subsequently – new social outcomes and facts (Cardinale, 2018). If societal level change had been my ultimate goal, it may have been that a frame breaking approach might have been more appropriate. For example, such an approach may have changed fewer people on average, but it may have changed their mind more fervently, and, like a zealous new convert, made them more vocal advocates for a more substantial change in norms at the broader community level, as opposed to being content with modifying their own behavior. On the other hand, the broader diffusion of innovation activities arising from a frame bridging approach may have a more significant impact, as innovation becomes more visible, and more normalized, through the greater exposure of a larger number of community members.

Although this represents a limitation of my study – that I was not able to extend this longitudinal analysis even longer, to see how such behaviors may have “trickled up” or “spilled over” to create new community-wide norms, this limitation also represents a fruitful avenue of future inquiry.

In conclusion, entrepreneurship training represents an important tool for poverty alleviation efforts. Yet, many such efforts have failed to achieve their intended impact as individuals receiving such training continue to practice the same kind of entrepreneurship – emulating existing business activities in their community – as before the training, albeit slightly more proficiently. Such efforts are typically necessary but insufficient, in that they often ignore the importance of changing the mental frames that guide how individuals enact the routines, actions, and scripts that comprise the entrepreneurial occupation. This study provides an important step in clarifying how such change might be most effectively achieved.

STUDY THREE: THE EFFECTS OF A ‘SCARCITY MINDSET’ ON ENTREPRENEURIAL IDEATION AND ACTION

ABSTRACT

Entrepreneurship holds significant promise to aid in efforts to foster economic growth among those living in abject poverty. Yet, to date, the cognitive effects of poverty on entrepreneurship have garnered scant empirical attention. In this paper, I combine extant research on a scarcity mindset with insights from the domain of entrepreneurial cognition to test whether a scarcity mindset has significant effects on individuals’ ability to ideate, as well as the likelihood that they will act on a new business opportunity. Through two lab experiments, I find that a scarcity mindset does affect individuals’ ideational capabilities by way of causing differences in the level of effort exerted on the task. Perhaps more importantly, I also find that the capability to ideate can be improved by inducing a more munificent mindset. Finally, I test the effect of a scarcity mindset on the likelihood that individuals will act on a new business idea, and find that scarcity also impacts this stage of the entrepreneurship process, with entrepreneurial self-efficacy acting as the mediating mechanism.

INTRODUCTION

Recent statistics count 2.5 billion people living in abject poverty, or an extreme scarcity of basic resources (Alvarez & Barney, 2013; World Bank, 2011). Despite \$2.3 trillion in aid by the West (Easterly, 2006), the number has remained relatively stable since the 1980's (Bruton, Ketchen, & Ireland, 2013). Entrepreneurship is increasingly heralded as a solution to break the cycle of poverty (Bruton et al., 2013) and many aid organizations and governments have begun to provide entrepreneurial training programs, which seek to alleviate the human capital barriers to entrepreneurship by trying to teach individuals entrepreneurial skills such as business plan writing and financial literacy. While some basic economic activity may have increased due to these efforts, many of these interventions that aim to stimulate entrepreneurship have failed to produce the desired end results (McKenzie & Woodruff, 2013), as individuals often use these technical skills to simply replicate existing businesses that they see around them (Alvarez & Barney, 2013; Bradley, McMullen, Artz, & Simiyu, 2012; Gielnik, Kramer, Kappel, Frese, 2014; Maas & Herrington, 2008). More specifically, even with these training programs, which provide valuable skills, individuals are still left without the important capability of generating new business ideas, or ideation.

A foundational element of the entrepreneurial act, ideation involves the generation of ideas for new products, services, or business models (Flynn, Dooley, O'Sullivan & Cormican, 2003; Amabile, 1983). At its core, ideation is a cognitive process (Gregoire & Shepherd, 2012; Flynn, et al., 2003; Amabile, 1983;) requiring a creative mindset (Puccio, Mance, Switalski, & Reali, 2012). Unlike early models of entrepreneurship that featured an entrepreneur with a creativity trait fortuitously identifying a "golden opportunity" in a stroke of genius, current research highlights that entrepreneurial ideation requires effortful generation of many ideas

(Gielnik et al., 2012). Moreover, it suggests that the ability to engage in broad ideation that results in many ideas can be improved, for example, through practice (DeTienne & Chandler, 2004); through physiological and cognitive recovery (Weinberger, Wach, Stephan, & Wegge, 2018); and through simply spending significant temporal and cognitive resources pondering various approaches to the problem for which ideation is required (Weinberger et al., 2018).

Recent research from the field of behavioral science suggests that scarcity has significant cognitive and behavioral implications, and that individuals living in poverty often develop a “scarcity mindset”; that is, the perception of having too little of something. In particular, a recent stream of behavioral economics research examines how a scarcity mindset essentially “taxes” mental bandwidth, negatively affecting decision making and behavior (Mani, Mullainathan, Shafir, & Zhao, 2013; Shah, Mullainathan & Shafir, 2012). Merging these two streams, I argue, given that scarcity has significant cognitive implications, that it may also create a distinct mindset that affects entrepreneurs’ thinking and ability to engage in the complex task of ideation. More specifically, I argue that a scarcity mindset (irrespective of an entrepreneur’s actual resource base) reduces the ability of individuals to ideate; conversely, that their ability to ideate may be improved by changing this mindset.

To empirically test this argument, I conducted two lab studies. In study 1, I primed individuals in randomly assigned conditions of scarcity and munificence, and then asked them to complete an entrepreneurial opportunity ideation task. This allowed me to test whether the ideation process may be improved by priming a resource munificent mindset, and to identify ‘task effort’ (Gatewood, Shaver, Powers & Gartner, 2002) as an important causal mechanism underlying this relationship. Based on the results from the first study, and given that ideation is only the first stage of the two basic stages of the entrepreneurial process (McMullen & Shepherd,

2006), I decided to conduct a second lab study to better understand scarcity's impact on the second stage; the decision to take entrepreneurial action on an idea. Given that this stage of the process is affected by an entrepreneur's perceived ability to successfully exploit a new business idea (McMullen & Shepherd, 2006), I hypothesize entrepreneurial self-efficacy (ESE) as a mediating mechanism. Therefore, in the second study, I again randomly primed a munificent and scarcity mindset and asked participants to engage in an entrepreneurial decision-making exercise to see if a munificent mindset could increase ESE, and subsequently increase the likelihood that individuals will take entrepreneurial action on new business ideas. The results of these studies supported my hypotheses, demonstrating not only the effects of scarcity and munificence on the entrepreneurship process, but also the mechanisms that cause these distinct mindsets to hinder or facilitate entrepreneurial outcomes.

These findings make a number of contributions to existing theory and practice. First, I question the "stubborn facticity" of an entrepreneur's resource environment (Baker & Nelson, 2005). While most studies are based on a fundamental underlying assumption that resources are an objective reality, I suggest that an entrepreneur's perception of her resources is in fact malleable, that this aspect is not necessarily related to her objective resource position, and most importantly, that fostering a different mindset may improve entrepreneurial outcomes. In so doing, I explore the effects of an undertheorized explanatory variable – that of a scarcity mindset – on entrepreneurial outcomes at both stages of the entrepreneurial process.

Second, I isolate the mechanisms of task effort and entrepreneurial self-efficacy (ESE) linking a scarcity mindset to ideation and entrepreneurial action respectively. While the link between ESE and entrepreneurial outcomes has been examined, the question of what factors add to, or deplete, ESE remains under theorized. Third, I draw from, and contribute to, the nascent

stream of behavioral economics research that seeks to understand the effects of scarcity on cognition and decision-making (e.g., Hall, Zhao, & Shafir, 2014; Mani et al., 2013; Shah et al., 2012). Here I provide insight into two new dependent variables – entrepreneurial ideation and exploitation – which adds to the accumulation of knowledge about the many pernicious effects of scarcity. And finally, I provide concrete insights for NGOs and policy makers as to how better to invest resources to foster entrepreneurship among the poor. These findings suggest that triggering more innovative types of entrepreneurship may be at least partially achieved by inducing a more munificent mindset as part of existing training programs.

THEORETICAL FOUNDATIONS

Poverty and Entrepreneurial Ideation

Despite three decades of efforts by aid agencies and governments, poverty remains a dominant feature across the globe (Alvarez & Barney, 2013; Bruton et al., 2013; Stiglitz, 2002). Although definitions vary, poverty is generally defined as the inability of an individual to address fundamental needs such as food, clean water, and shelter (Bradshaw, 2007), and the World Bank (2011) provides a threshold for absolute poverty which includes those living on \$1.90 per day or less. Entrepreneurship is widely considered to be an important tool to break the cycle of poverty, and many of the collective efforts towards poverty alleviation by governments and development agencies (NGOs), as well as researchers, have begun to emphasize entrepreneurship (Hall, Matos, Sheehan, & Silvestre, 2012), through a wide range of training programs such as the International Labor Organization’s Start and Improve Your Business program, the United Nations’ Empretec program, and the German Agency for International Cooperation’s CEFE program (McKenzie & Woodruff, 2013). Such programs often focus on

skills such as financial literacy, business plan writing, and marketing. Unfortunately, the result of such efforts often fail to achieve their intended aim (McKenzie & Woodruff, 2013), as despite the technical training they receive, individuals are still left without the ability to generate new business ideas. As a result, individuals will often use these technical skills to copy businesses that already exist in their community (Alvarez & Barney, 2013; Bradley et al., 2012; Gielnik et al., 2014; Maas & Herrington, 2008), rather than identify novel business opportunities through ideation.

Ideation is a cognitive process involving the generation of ideas for new products, services, or business models (Flynn et al., 2003; Amabile, 1983). Before individuals act on an opportunity, they typically first engage in divergent ideation; that is, the broad ideation of many ideas (Gielnik et al., 2012; Hennessey and Amabile, 2010). At this phase of idea generation, a would-be entrepreneur may not even have domain-specific knowledge, but is motivated to exert effort to “increasingly allocate attention to the issue(s) related to the domain of entrepreneurial interest, [which] makes the individual more sensitive to his or her environment...producing deliberate search (McMullen & Shepherd, 2006: 141). The importance of entrepreneurs’ ability to generate a large number of ideas at this initial stage of divergence has been firmly established in the literature (Basadur, Graen, & Green, 1982; Mumford et al., 1991; Seelig, 2015).

A wide range of factors have been suggested to affect ideation. Two dominant approaches include a trait-based approach, which seeks to identify stable characteristics of creative individuals (e.g., Barron & Harrington, 1981; Ardichvili, Cardozo, & Ray, 2003), and a “malleable” approach, which posits that this ability is not stable, but rather that various situational elements, such as features of the environment (e.g., Amabile, Conti, Coon, Lazenby, & Herron, 1996; Gertner, 2012), social network (e.g., Perry-Smith & Mannucci, 2017), or

cognitive state (e.g., Weinberger et al., 2018) can influence individuals' creativity and thus ideational capabilities (Runco, 2004). From the trait-based perspective, individuals with superior abilities and specific personalities can make “fortuitous discoveries” in a flash of creativity (Kirzner, 1997). Such abilities and characteristics include creative personality profiles (DeTienne and Chandler, 2004; Shane and Nicolaou, 2015); optimism (Ardichvili et al., 2003); a positive affective trait (Baron and Tang, 2011); cognitive flexibility (Perry-Smith & Mannucci, 2017); analogical thinking (Cornelissen & Clark, 2010; Gielnik et al., 2012); the ability to engage in mental simulation (Kahneman & Tversky, 1982); the ability to use structural alignment to identify new means ends possibilities (Gregoire & Shepherd, 2012); and the ability to engage in divergent thinking (Ames and Runco, 2005; Gielnik et al., 2012a; Gielnik et al., 2014).

More recent perspectives suggest that the ability to ideate is malleable; that is, a teachable skill (DeTienne & Chandler, 2004), based on access to knowledge or experience (Gielnik et al., 2012; Amabile, 1983) or a state that can vary even daily based on physiology (Bledow et al., 2013; Weinberger et al., 2017); affect (Bledow et al., 2013); or goal structures (Uy et al., 2015). For example, DeTienne and Chandler (2004) suggest that entrepreneurs can learn to increase the number of opportunities they generate, by engaging in such activities as recording opportunities in a journal daily, sharing these ideas, engaging in deliberate brainstorming sessions, and receiving feedback on ideas. Uy et al. (2015) find that when entrepreneurs perceive momentary advancement towards a venture goal, it positively influences their expenditure of effort on creative tasks each day, suggesting that simply “reducing ambitious goals into bite-sized progress markers” can positively influence creative effort. Bledow et al. (2013) find that individuals self-report higher levels of creativity if they experience an “affective shift”; that is, an episode of negative affect followed by an increase in positive affect. In summary, ideation is

a cognitive process, affected by a range of factors, both trait and state. Yet, despite the growing interest in studying entrepreneurship in contexts of resource scarcity, one factor that has yet to be considered is the cognitive effect of scarcity on entrepreneurial behavior.

The Cognitive and Decision-Making Effects of Scarcity

A nascent stream of behavioral economics research addresses the role of resource scarcity – the perception of having too little of something – on basic cognitive function. For example, Mani et al., (2013) found a 13-point difference in the effect of a scarcity prime on poor participants as compared to wealthy participants in pre-post IQ and cognitive control tests. Similar results have been found outside of the lab. For example, Shah et al. (2013), using natural variation in income among Indian sugarcane farmers as a reflection of scarcity, administered IQ tests to the same farmers pre- and post-harvest. Controlling for potential confounds such as caloric intake, stress, and calendar effects, the results of the study indicated that fluid intelligence was indeed hindered by scarcity (Shah et al., 2013).

According to Mullainathan and Shafir (2013), the cognitive response to scarcity is a “bandwidth tax”, or the psychological concept of having “less mind” to dedicate to the task at hand. Such a reduction in bandwidth forces individuals to tunnel, or focus only on the most pressing needs in an attempt to alleviate the most salient scarcity-related need, at the exclusion of more long-term needs. The positive result of this effect is that a heightened focus can lead to better results on the current task or need as it relates to alleviating the scarcity concern; conversely the negative implications of focusing on one thing is the neglect of other (often more important and future-oriented) aspects, as the mind is drawn back into the tunnel, inhibiting even

basic capacities because it “creates an additional load on top of all their other concerns” (Mullainathan & Shafir, 2013: 63).

A number of studies have sought to explore specific ways in which having a ‘scarcity mindset’ can affect individual decision making and behavior. For instance, cognitive limitations induced by scarcity can affect how individuals assign probabilities to certain economic outcomes, and make them more likely to rely on easily-accessible information such as heuristics (Deck & Jahedi, 2013) to reduce cognitive burden (Shah & Openheimer, 2008; Leana & Meuris, 2015). Other studies have demonstrated that a scarcity mindset can result in increased risk aversion (Whitney et al., 2008; Gerhardt, 2013) and a higher likelihood that individuals will select a smaller immediate pay-off over a larger future pay-off (Hinson et al., 2003; Getz, 2013), although the findings on this are mixed (Deck & Jahedi, 2015; Benjamin et al., 2013; Franco-Watkins et al., 2006; 2010).

Having a ‘scarcity mindset’ has also been shown to influence levels of physical effort. The underlying rationale for this linkage is that “variability in the availability of resources in the environment was a recurrent adaptive problem, [and] natural selection likely shaped a psychological adaptation causing people to reduce effort on physically taxing tasks [even if] not directly related to energy replenishment” (Pitesa & Thau, 2017: 2). Such a link between psychological adaptations to resource scarcity and physical effort can manifest in a variety of ways. For example, Hill, Rodeheffer, Griskevicius, Durante, and White (2012) found that women expended more effort on their appearance (based on spending on appearance-enhancing products) in times of scarcity. Pitesa & Thau (2017) have empirically documented that simply priming scarcity in individuals by asking them to read an article about a scarce resource event (such as a drought) can decrease the level of effort on a physical work task.

Taken together, these results suggest that a scarcity-induced cognitive overload may be an important factor in the “cycle of poverty” that can ensnare individuals, (Leana & Meuris, 2015), or the “scarcity trap” (Mullainathan & Shafir, 2013). Skill development and knowledge acquisition become even greater challenges when individuals are in a ‘scarcity’ cognitive state, often rendering well-intentioned capacity-building interventions by governments and NGOs relatively ineffectual (Mullainathan & Shafir, 2013, Leana & Meuris, 2015). Given the significant cognitive and behavioral implications that a scarcity mindset incurs, I suggest that it may also create a distinct mindset that affects entrepreneurs’ thinking and ability to engage in the critical task of ideation. In the following studies, I therefore ask the research question: *what are the effects of a scarcity mindset on entrepreneurial cognition, and why?*

HYPOTHESES AND EMPIRICS

Study 1: The Effects of Resource Mindset (Scarcity/Munificent) on Entrepreneurial Ideation and the Mediating Effect of Task Effort.

As described above, prior work has illustrated a range of negative effects of scarcity on basic cognitive processes and decision making. A separate stream of research seeks to understand the cognitive process of entrepreneurial ideation. Merging these two streams, in the following study I will explore the effects of a scarcity vs munificent mindset on entrepreneurial ideation. Entrepreneurial ideation is a cognitive task that involves such mental challenges as analogical reasoning, conceptual combination and reorganization, abstraction (Mumford, 2003; Ward, 2007; Gielnik et al., 2012), cognitive flexibility (Perry-Smith & Mannucci, 2017), cognitive processes of structural alignment (Gregoire, Barr & Shepherd, 2010), and mental models that facilitate the identification of structural and superficial similarities, ultimately

making connections between means and ends, to make creative mental leaps (Gregoire & Shepherd, 2012). In short, this complex task requires a significant amount of mental energy that may limit the number of new business idea that can be generated when a 'scarcity mindset' is present.

To illustrate the cognitive effects of scarcity, Mullainathan and Shafir (2013) provide the analogy of packing a suitcase: packing a large suitcase with plenty of space is an effortless and quick task that requires few tough decisions and trade-offs, whereas packing a small suitcase is a time-intensive task requiring that each item must be evaluated carefully based on its utility, and this utility must be weighed against the amount of space it takes up in the suitcase, leaving less room for other items. This careful evaluation and decision-making process is analogous to the process of carefully evaluating economic decisions under conditions of scarcity – it is a significantly more difficult process that uses mental energy, allowing less cognitive space for other (perhaps more important) decisions and mental processes, such as in this case, generating new business ideas.

In summary, prior research has focused primarily on the significant negative effects of scarcity (Mullainathan & Shafir, 2013), as individuals in a scarcity mindset have "less mind" to dedicate to the task at hand. Yet, underlying the basic premise of scarcity as a mindset is that – while actual resource positions can trigger these mindsets – they are not necessarily reflective of actual resources, but rather psychological states (Mani et al., 2013). Moreover, as with most psychological states, these are states that are malleable and can be induced. For example, Roux et al. (2015) activated a scarcity mindset via an episodic recall task, which in turn activated a competitive orientation. Pitesa and Thau (2017) similarly activated a scarcity mindset via environmental resource scarcity cues (news of droughts or food shortages), that reduced physical

effort. Mani et al. (2013) primed for a greater scarcity mindset via a hypothetical scenario around a scarcity scenario, causing cognitive decline. Put simply, individuals can feel poor or rich, without an objective change in resources (Roux et al., 2015). This feeling can in turn have a significant influence on behaviors and task abilities.

As a result, here I suggest that when individuals are primed to have a munificent mindset, they will have "more mind" to dedicate to the task of ideation, as they will be more cognitively free to focus outside of the realm of difficult decisions and trade-offs. Returning to the suitcase analogy above, when an individual has a larger suitcase, they do not need to consider each individual item they will pack as carefully, and they have more mind to apply to other tasks, as they are more cognitively free to focus outside of the realm of difficult decisions and trade-offs (Mullainathan & Shafir, 2013). In the case of my task of interest, entrepreneurial ideation, while individuals in a scarcity mindset are hindered in their ability to ideate, individuals in a munificent mindset may be able to leverage the additional cognitive resources afforded by "feeling rich" to generate a larger number of new business ideas.

As reviewed above, a 'scarcity' mindset can manifest itself in a number of different ways including an overreliance on heuristics, a preference for more immediate payoffs, and even a reduction in physical effort (Deck & Jahedi, 2013; Getz, 2013; Pitesa & Thau, 2017). As also described above, the process of ideation is very much dependent on the level of effort an individual puts into to the task of identifying new business opportunities (Gielnik et al., 2012; McMullen & Shepherd, 2006). Merging these two streams of research, I anticipated that 'task effort' will act as an important mediating mechanism linking a scarcity/munificent mindset to ideation within the entrepreneurship process.

Prior work has established the effects of scarcity on the decisions individuals make on the allocation of physical effort (Hill et al., 2012; Laran & Salerno, 2013), for example with findings linking the salience of a scarcity-related event to a decision to decrease energy expenditure on a physical task (Pitesa & Thau, 2017). Extending such logic to the mental task of ideation, I similarly expect decreased effort resulting from a ‘scarcity mindset’ for several reasons. First, the task of ideation is fairly complex in that it requires divergent thinking, cognitive flexibility, and a high level of emotional persistence (Bledow et al., 2013; Gielnik et al., 2014; Perry-Smith & Mannucci, 2017). Whereas prior research has shown no effect of a scarcity mindset on simple mental tasks (Pitesa & Thau, 2017), mental tasks vary significantly in their level of difficulty or effort. Given the amount of mental bandwidth involved in ideation, this is a task that requires a significant amount of task effort (Gregoire & Shepherd, 2012; Uy et al., 2015), by which I refer to a “limited-capacity resource that can be allocated”, at different levels of intensity, to a given task (Yeo & Neal, 2004, p. 231; Brown and Leigh, 1996; Kanfer & Ackerman, 1989; Gatewood et al., 2015; Uy et al., 2015). Second, research suggests that scarcity depletes behavioral control (Spears, 2010). This is important to the potentially difficult task of ideation as behavioral control can maintain individuals’ motivation to expend effort even when a task is considered unpleasant. Finally, prior works linking a ‘scarcity mindset’ to the increased use of simple heuristics in decision making (Deck & Jahedi, 2013) indicates the potential avoidance of cognitively taxing activities.

Therefore, I suggest that priming a scarcity mindset may reduce the amount of effort that individuals will expend on an ideation task, which in turn will negatively affect their performance (in terms of the number of ideas they generate) on the task. Comparatively, I

suggest that priming a munificent mindset will increase the effort that individuals will expend on the ideation task, which in turn will positively affect their performance. More formally:

H1a: A munificent mindset will increase the number of business ideas individuals generate, as compared to a scarcity mindset.

H1b: Level of task effort will mediate the relationship between the resource mindset and the number of business ideas individuals generate.

Participants: To test these hypotheses, I conducted a between-groups (scarcity/munificence) lab experiment with an online participant pool. My reasons for electing an online sample are threefold. First, I wanted to understand the malleability of a scarcity or munificent mindset, therefore I wanted a diverse pool of participants from a broad range of socioeconomic backgrounds, not commonly found among students or other organizations. Second, I wanted the ability to capture the amount of time individuals spent on each portion of the task, which is most easily and unobtrusively achieved through an online platform. Third, the most common type of entrepreneur in my setting of interest (poverty) is not an entrepreneur driven by opportunities, but rather by necessity, also known as a “necessity entrepreneur” (Acs, 2006). Therefore, I did not want to test my hypotheses on entrepreneurs, but rather on individuals who would be “forced” into entrepreneurial decisions without an a priori desire to do so. I elected to use an online platform called Prolific Academic, which I felt had significant advantages over the more ubiquitous Amazon Mechanical Turk (MTurk), namely diversity of participants and greater ability to pre-screen, ability to filter for participant naïveté, and data quality (based on attention checks) (Peer, Brandimarte, Samat & Acquisti, 2017).

This study included 200 individuals who were paid US\$2.25 to complete the process, which took an average of 15 minutes. My only pre-screening criteria were approval rate (having received an acceptance rate of 90% or more of past studies) and naiveté (five submissions or fewer in total, and no submissions to any of my previous studies), generating a diverse participant pool. A qualitative manipulation check identified 29 participants who did not adequately complete the task, and 3 additional responses were not used because their time on task was more than three standard deviations from the mean, for a final sample size of 168.

Measures.

Scarcity/Munificent Mindset (Manipulation): Because no experimental manipulation in prior literature met my intent to simulate poverty-related scarcity, I developed and calibrated a novel game-style manipulation that simulates conditions of scarcity and munificence. The intent was (as closely as possible) to approximate the sense of scarcity that the poor experience; that is, a constant stream of economic decisions where individuals are forced to select between a series of suboptimal choices, each of which taps into already scarce resources. During a series of prime calibration pilots, I began by comparing the game I developed to other scarcity primes, including episodic recall (Roux, Goldsmith & Bonezzi, 2015), which I had also used in my first study, and hypothetical scenario (Mani et al., 2013). I selected the game-style scarcity manipulation because it a) had a larger effect; b) more closely approximated the type of scarcity I sought to study; and c) was fully removed from any experience the participants may have previously had, which was important to me because my aim was to determine whether the scarcity mindset was something I could induce, isolated from an individual's actual resource state. After selecting the game, I next refined it to produce sufficient variation in the manipulation response through a manipulation

check, which relied on a validated scarcity scale (Roux et al., 2015). Details of both game versions can be found in Appendix 1.

Number of Ideas Generated: Next I asked participants to complete an ideation task. More specifically, the task began with the following scenario: “You have an uncle who recently passed away, and you learn that he has left you his restaurant. You are tired of working for someone else, and you decide to pursue this opportunity. After visiting the restaurant, you determine that while you have inherited some assets, the business itself is barely surviving, and you are going to have to identify ideas for new businesses (new products or services) to make ends meet. Any new opportunities you identify must match what you currently have with what customers need”. I then provided a list of five common items, such as a physical space and a computer (means), and four common customer needs, such as childcare and entertainment (ends). I then asked participants to “consider these assets and needs listed above, and make as many matches between them as you can think of, to identify innovative new business opportunities”, and asked them to provide a description of how the asset would be used to fulfill a specific customer need. I specified to participants that they should a) not simply state what the asset is currently being used for, but rather think up new business ideas; and b) not use the same idea more than once. This approach is consistent with Baron’s (2006) conceptualization of entrepreneurial idea generation as “pattern recognition” or “connecting the dots”; that is, the ability to match means with ends.

Task Effort: The level of task effort was measured by tracking the number of seconds each participant spent on the ideation task.

Table 6: Means, SDs, & Correlations for Study 1

	Mean	SD	1	2	3
Scarcity/Munificent Mindset	0.50	.50	1		
Level of Effort	44.86	32.38	0.16*	1	
Number of Opportunities	3.36	2.23	0.14†	0.56**	1

p<.10 †, p<.05 *, p<.01 **, p<.001 ***

Results. Table 6 displays summary statistics and correlations. In partial support of hypothesis 1a (please see Table 10), I find that individuals in the munificent condition ($M = 9.6$) generated more ideas than those in the scarcity condition ($M = 8.18$, $p = .08$). To test my hypothesis related to the indirect effect between munificence and idea generation (H1b), I relied on the SPSS macro PROCESS (Hayes, 2015), model 4, which uses a bootstrapping technique that is more accurate in testing mediation. Consistent with hypothesis 1b, my findings suggest that a munificent mindset influenced idea generation via effort expended on the task (please see Table 10). This indirect effect was found using a 95% bootstrapping confidence interval (LLCI: .1059, ULCI: 1.9055). In addition, I examined the direct effects between munificent mindset and task effort, and between task effort and idea generation. Consistent with my H1b rationale, task effort affects ideas generated ($p = .0000$). Moreover, I find that my treatment influences task effort, such that on average, individuals in the munificent mindset condition expended greater task effort ($M = 46.6203$) than those in a scarcity mindset ($M = 38.02$, $p = .0342$).

Table 7: Main Effect Analysis for Study 1*Dependent Variable: Number of Opportunities*

	Beta	SE	Sig
Scarcity/Munificent Mindset	1.417	.808	.081

Table 8: Mediation Analysis for Study 1*Dependent Variable: Level of Effort*

	Beta	SE	Sig
Constant	38.02	2.85	.0000
Scarcity/Munificent Mindset	8.60	4.03	.0342

Dependent Variable: Number of Opportunities

	Beta	SE	Sig
Constant	3.96	0.69	.0000
Level of Effort	0.11	.01	.0000
Scarcity/Munificent Mindset	0.46	0.68	.5004

Test for Indirect Effect of X on Y

	Beta	SE	LLCI	ULCI
Level of Effort	0.95	0.45	.1059	1.9055

Discussion. My results from Study 1 suggest that scarcity has a negative impact on individuals' ability to ideate, and perhaps even more importantly, my results suggest that individuals' ability to ideate can be improved by inducing a more munificent mindset. I also found that this relationship was mediated by the amount of task effort expended by participants; that is, a more munificent mindset caused participants to try harder, thereby improving task performance. While task effort is a behavioral measure, I was also interested in how the mindset manipulation made my participants feel, so I also asked participants to comment on how playing the game affected them emotionally. Their responses hint at some of the emotional effects that a scarcity mindset induces, and why it may result in a decrease in task effort. The emotional responses the participants in the scarcity condition reported most frequently included frustration, a decrease in motivation, a sense of unfairness, a lack of agency over outcomes, and a decrease in personal responsibility over outcomes. Table 9 reports a subset of representative quotes from my participants' responses.

Table 9: Participants' Emotional Responses to Scarcity Mindset in Study 1.

Frustration	<p>I felt frustration, nervousness, desperation, and anger. Frustrated. Very little room for choice. I felt a bit of frustration because in the end even if I made good choices I got robbed and I lost all my money. I feel frustrated because it felt like no matter what choice I made, there was always another problem that followed. I felt frustrated because it seemed like no matter what choice I made, something ended up going wrong. I felt like I'd never be able to get ahead, which made me anxious.</p>
Decrease in motivation	<p>Playing the game was frustrating because it seemed like so much was out of my hands. It also seemed like any decision I made would result in a negative outcome. The more I played the less motivated I was because I didn't believe my decisions had a chance to result in a good outcome.</p>
Sense of unfairness	<p>I think that was a game that puts your survival mode active and thinking that life is really unfair, at that point you think that it's just a game, but in fact it's just a faint picture of what life has become. I have got a little bit nervous about the life is not always fair. Even if you try to do everything correct, the Universe is not on your side (stolen wallet). It is very disheartening feeling to experience such things.</p>
Lack of agency or control over outcomes/	<p>A bit frustrating, since it feels that my choice doesn't really matter, so my control in the game is taken away. I felt more and more sad and frustrated more I do worse I go felt like there was no way out. Playing the game made me feel frustrated, apprehensive and finally, defeated, because just as with the man in the game, nothing I do seems to make any difference, and I always seem to have very little or no money, certainly never enough to manage on. Powerless, I didn't feel like I really had decisions to make but rather I was forced to choose from just the ones presented to me. Frustrating about decisions being out of your control, which then makes you nervous about how easily this could happen in regards to your own life I was nervous and scared throughout the game. It seemed like all the choices led to worse situations. It was nerve wracking because every time I felt I was doing the right thing it cost me money which is like real life. It was as if money was the centre of this world, and I had no control.</p>
Decrease in sense of responsibility	<p>I think I started to blame the game rather than my own actions... Either this, or I started to blame the game because I wasn't happy with the outcome of my decisions, and needed to see myself rightful by doing so.</p>

While my results, coupled with these qualitative responses, paint a more comprehensive picture of the ideation stage of the entrepreneurial process, I also recognize that ideation is only the first stage of a process that also requires entrepreneurs to act on the opportunities they ideate. In addition, entrepreneurial programs conducted by NGOs and governments in contexts of poverty sometimes provide beneficiaries with ready-made business templates, having already identified the opportunity based on such factors as value chain analysis or assessment of local markets, such as in the case of microfranchising (Kistruck, Webb, Sutter, & Ireland, 2011). It is then up to the beneficiaries to act on these ready-made opportunities. Therefore, I decided to conduct a final study which sought to incorporate an understanding of the effects that a scarcity or munificent mindset will have on the second stage of the entrepreneurial process, the likelihood that entrepreneurs will “take the plunge” and act on a novel idea that they or others have generated. I next report the details and results of this study.

Study 2: The Effects of Resource Mindset (Scarcity/Munificent) on Entrepreneurial Action: The Mediating Effect of Entrepreneurial Self-Efficacy

Although entrepreneurship typically begins with ideation, prior work suggests that there are two basic stages of the entrepreneurial process (e.g., McMullen and Shepherd, 2006). At the first stage, as I have detailed above, individuals ideate, and identify “third person opportunities”; that is, opportunities that may be viable for “someone in the marketplace”. At this stage, knowledge and cognitive processes of ideation are foregrounded. However, at the second stage, to which I now turn my attention, an individual must exercise judgment as to whether this business ideas represent a “first person opportunity”; that is, an opportunity that is attainable for this individual (Haynie et al., 2009).

Although as yet untested, prior work would suggest that a scarcity mindset may also affect the likelihood that individuals will take entrepreneurial action on a business idea that is somehow new or different. This is particularly likely in contexts of poverty, where entrepreneurship often takes the form of copying businesses that already exist in their community (Alvarez & Barney, 2013; Bradley et al., 2012; Gielnik et al., 2014; Maas & Herrington, 2008), rather than identify innovative business ideas. In such contexts where copying (rather than innovating) is the widely accepted norm, a decision to act on an innovative new business idea comes with significant (social and business) risk, and requires a long-term outlook (Slade Shantz, Kistruck & Zietsma, 2018). Given existing evidence that scarcity and other kinds of mental burdens affect how individuals assign probabilities to economic outcomes, such as increased risk aversion (Deck & Jahedi, 2015; Whitney et al., 2008; Gerhardt, 2013; Benjamin et al., 2013) and decreased future orientation (Hinson et al., 2003; Getz, 2013), I suggest that a scarcity mindset is likely to affect the likelihood that individuals will take entrepreneurial action on an innovative business opportunity, whether it is one that they have ideated, or one that has been presented to them.

I suggest that one of the primary mechanisms linking resource mindsets to entrepreneurial action will be entrepreneurial self-efficacy (ESE). ESE has been suggested to strongly affect entrepreneurial behavior at the first-person opportunity stage of the entrepreneurial process. At this stage, motivation and belief (in the opportunity and in themselves) are critical, as, according to McMullen and Shepherd, entrepreneurs “need not have a high tolerance for uncertainty if they believe that they know what they are doing” (2006: 141), and if these conditions are met, they are more likely to act. In tandem, scarcity has been suggested, through prior work and through hints from my qualitative data from Study 2, to

decrease individuals' sense of confidence in their abilities and agency. For example, one recent study has demonstrated the link between inequality (closely related to scarcity) and relative ability beliefs. In this study Butler (2014) experimentally manipulated unequal pay for an identical cognitive ability task, and found significant effects on confidence and beliefs (but not performance). Over and above this theoretical rationale, I also found suggestions in my participants' earlier qualitative responses that alluded to the scarcity mindset's effects on their confidence in their abilities. For example, respondents alluded to an inability to make decisions resulting in a positive outcome, an inability to "get ahead", that the "more I do, worse I go...no way out", and that "just as with the man in the game, nothing I do seems to make any difference".

Collectively, such insights highlight the important role of self-perceptions in entrepreneurial decision-making (Gatewood, Shaver & Gartner, 1995; Podoyntsiyna, Van der Bij & Song, 2012; Townsend, Busenitz & Arthurs, 2010), particularly related to ESE (Zhao, Seibert, & Hills, 2005), or ones' belief in his or her ability to create and manage a business (Chen et al., 1998; Shepherd et al., 2013; Arora et al., 2011; Zhao et al., 2005). Some prior work has explored the antecedents of ESE, primarily human capital (e.g., Carr & Sequieira, 2007; Zhao et al., 2005) and cognitive elements (e.g., Arora, Haynie & Laurence, 2013; Kickul et al., 2009), but the level of scarcity has not yet been tested as a factor in ESE. Based on this logic, I suggest that scarcity/munificence will affect ESE, which in turn will affect the likelihood that an entrepreneur will indicate a willingness to exploit a new business opportunity.

H2a. A munificent mindset will increase the likelihood that an entrepreneur will exploit a new business opportunity, as compared to a scarcity mindset.

H2b. ESE will mediate the relationship between the resource mindset and the likelihood that an entrepreneur will exploit a new business opportunity.

Participants and Procedure: To test these hypotheses, I again conducted a between-groups (scarcity/munificence) lab experiment with an online participant pool. More specifically, this study included 200 individuals (different individuals from Study 1), recruited via Prolific Academic. Participants were again paid US\$2.25 to complete the process, which took an average of ten minutes. My pre-screening criteria were identical to study 1. Of my 200 participants, I did not include 2 responses because of poor data quality (based on the qualitative manipulation check), for a total of 98 in the scarcity condition and 100 in the munificence condition.

Measures.

Scarcity/Munificent Mindset (manipulation). My resource mindset manipulation was identical to that of study 1, whereby I primed individuals randomly assigned to either a scarcity or munificence condition. Following this, I provided the following entrepreneurial stimulus: “Now imagine that you have recently thought of an innovative new business idea. Please use the next few questions to consider whether or not to pursue this idea.” I then followed this with a series of survey items that captured my variables of interest, including ESE, and likelihood of acting on a new business opportunity.

Entrepreneurial Self Efficacy. Given that I was interested in self-perceptions of ESE over a range of tasks rather than any domains specifically, I used an ESE scale developed by Zhao et al. (2005), which includes four items regarding entrepreneurial domains such as new business creation, commercialization, and creative thinking, which I then averaged to form a general measure of entrepreneurial self-efficacy (Zhao et al., 2005). Participants were instructed to “Please indicate your level of confidence in your entrepreneurial abilities in the following areas,

using a scale of 1 to 7, with 1 indicating No confidence and 7 indicating Complete confidence.”

Likelihood to Act on Innovative Opportunity. For my dependent variable, I follow prior work on entrepreneurial intentions (Douglas & Shepherd, 2002; Fitzsimmons & Douglas, 2011) to capture the likelihood that my participants will take action on a new business opportunity with a 7-point Likert scale ranging from extremely unlikely (‘1’) to extremely likely (‘7’) for three items measuring entrepreneurial intention. Following Fitzsimmons and Douglas (2011) I asked (i) Is pursuing an innovative entrepreneurial opportunity a likely option for you? (ii) If you were to start a business, what is the likelihood that you would exploit a radically innovative idea? (iii) If you were to start a business, what is the likelihood that you would exploit a moderately innovative idea? I subsequently averaged these items to obtain my dependent variable.

Table 10: Means, SDs, & Correlations for Study 2

	Mean	SD	1	2	3
Scarcity/Munificent Mindset	0.51	0.50	1		
Entrepreneurial Self Efficacy	4.52	1.17	0.18*	1	
Likelihood to Act	4.77	1.37	0.22**	0.69**	1

p<.10 †, p<.05 *, p<.01 **, p<.001 ***

Results. Table 4 displays summary statistics and correlations. Consistent with hypothesis 2a, my findings suggest that having a scarcity/munificent mindset will influence the likelihood that an individual will take action on an idea. In the scarcity condition (M = 4.463), individuals were less likely to take entrepreneurial action than in the munificence condition (M = 5.06; p = .002). To test the indirect effect between scarcity mindset and likelihood to act, I again relied on the SPSS macro PROCESS (Hayes, 2015), model 4. Consistent with hypothesis 2b, this effect happens indirectly via ESE. This indirect effect was again found using a 95% bootstrapping confidence interval (LLCI: .0839, ULCI: .5877). In addition, I examined the direct effects

between mindset and ESE, and between ESE and likelihood to act. Consistent with my rationale, ESE increases likelihood to act ($p=.0000$). Moreover, I find that my treatment influences ESE, such that on average, individuals in the munificent mindset condition ($M = 4.73$) exhibited higher levels of ESE than those in a scarcity mindset ($M = 4.31$; $t = 2.5478$; $p = .0116$).

Table 11: Main Effect Analysis for Study 2

Dependent Variable: Likelihood to Act

	Beta	SE	Sig
Scarcity/Munificent Mindset	.601	.190	.002

Table 12: Mediation Analysis for Study 2

Dependent Variable: Entrepreneurial Self Efficacy

	Beta	SE	Sig
Constant	4.31	0.12	.0000
Scarcity/Munificent Mindset	0.42	0.16	.0116

Dependent Variable: Likelihood to Act

	Beta	SE	Sig
Constant	1.06	0.28	.0002
Entrepreneurial Self Efficacy	0.79	0.06	.0000
Scarcity/Munificent Mindset	0.27	0.14	.0572

Test for Mediation Effect

	Beta	SE	LLCI	ULCI
Entrepreneurial Self Efficacy	0.33	0.13	.0839	.5877

Discussion. In this study I found that scarcity also affects individuals at the second stage of the entrepreneurial process; the intention to take entrepreneurial action. More specifically, I found that a scarcity mindset decreases ESE, which in turn inhibits the likelihood that individuals will take entrepreneurial action. As compared to Study 1 where effort was shown to be an important mediating mechanism, the decision of whether or not to take entrepreneurial action is more of an intention rather than a complex task. Thus, while Study 1 suggests the negative relationships between resource mindset and ideation is mediated by a decrease in effort, the results of Study 3 suggest the intention to take action is at least partially ‘blocked’ by scarcity’s pernicious effects on internal doubts about one’s ability to be successful in implementation.

DISCUSSION

Entrepreneurship holds significant promise to aid in efforts to foster economic growth among those living in abject poverty, yet to date, the cognitive effects of poverty on entrepreneurship have garnered scant empirical attention. In this paper, I combine extant research on a scarcity mindset with insights from the domain of entrepreneurial cognition to demonstrate that a scarcity mindset has significant effects, both on individuals' ability to ideate, as well as the likelihood that they will act on new opportunities. Following calls for entrepreneurship scholars to focus more on the "early stages of creation of new economic activities" (Davidsson, 2015: p 676; see also Shepherd, 2015), I find that a scarcity mindset does affect individuals' ideational capabilities, and more importantly, that this capability can be improved by inducing a more munificent mindset. Subsequently, recognizing that entrepreneurship does not occur if individuals do not also act on new ideas, I also find that scarcity does also have an effect at this important stage.

These findings make a number of theoretical contributions. First, they call into question assumptions about resources as an objective reality for entrepreneurs. While many studies are predicated on this underlying assumption, my findings suggest that an entrepreneur's perception of those resources may be as important as the resources themselves. I shed light not only on the negative implications of a scarcity mindset, but also the more exciting prospect that this mindset is malleable, and that by altering this perception, entrepreneurial outcomes may be improved. Given the vast research and cottage industry that has been built up around teaching entrepreneurial innovation and ideation skills – with events such as "start-up weekends" and 'business model canvas' sessions – the finding that an approach directed at changing an entrepreneur's mindset may also prove successful at improving ideational capabilities is

important. Although this study only tests this malleability in a lab setting, this initial insight sets the stage for future research to identify ways to induce a more munificent mindset, and the benefits that come with it, in a field setting.

Along similar lines, I shed light on an ongoing debate about whether resources help or hurt entrepreneurial innovation. From this perspective, munificent resources have been demonstrated to facilitate the perception of growth opportunities in the form of the recombination of idle resources (Penrose, 1959), enhancing experimentation and risk taking by providing funding that can be used for more uncertain projects (George, 2005). Conversely, this can be a double-edged sword (Bradley et al., 2011), and scarcity has been suggested to encourage bricolage (Levi Strauss, 1966; Baker & Nelson, 2005; Stinchfield, Nelson, & Wood, 2012); improvisation (Baker, Miner & Eesley, 2003); entrepreneurial thinking (Sarasvathy, 2001), and improve creativity (Moreau & Dahl, 2005; Mehta & Zhu, 2015). I suggest that, in addition to the resources themselves, that the mindset they induce must also be considered.

Consider, for example, the differential mindsets of entrepreneur # 1, who has just secured a round of funding but has not yet received the funding, versus entrepreneur # 2, who still has money in the bank but is acutely aware of her venture's high burn rate, and is struggling to find ways to either generate funding or decrease costs. Although they may have equal amounts of money available to them, entrepreneur # 1 is likely to be in a munificent mindset, and entrepreneur # 2 a scarcity mindset. My findings suggest that while entrepreneur # 1 may be experiencing a wealth of ideas and energy for her venture, it is exactly at the moment that the entrepreneur # 2 most needs to be generating ideas and expending effort, that her scarcity mindset may begin to work against her. Moreover, my findings hint at the notion that there may be ways to induce a munificent mindset in her, which may give her the additional boost she

needs to succeed through a difficult moment. In summary, my findings allude to negative implications of scarcity, and I isolate specific reasons for why this might be the case at the two different stages of the entrepreneurial process.

My findings related to task effort also contribute to theories of workplace motivation, which, despite considering many other antecedent factors, such as job design, affect, rewards or incentives (Latham & Pinder, 2005; Locke & Latham, 2004) have yet to consider a munificent mindset as an antecedent to motivating employees to expend maximum effort on their tasks. In so doing, this also hints at the damaging potential for workplace messages that focus on scarcity, such as a manager informing her team that their sales performance was below forecasted levels, or that the factory did not achieve its intended widget output, or that the company did not hit projected quarterly earnings, may have on employees' mindsets and therefore the effort they expend. That said, entrepreneurial ideation is one specific kind of task, requiring significant creativity, and it is therefore possible that my findings may not apply to other, perhaps less creative or complex, types of tasks.

My findings also demonstrate that a scarcity/munificent mindset affects entrepreneurial self-efficacy (ESE). While ESE, and self-efficacy or confidence more generally, has many positive outcomes in the workplace, less is understood about its antecedents. ESE is considered to play an important role in the likelihood that individuals will act on ideas, as "some creators might come up with groundbreaking ideas but never voice them because of fear of being seen as different...They either abandon a promising idea before presenting it to the relevant gatekeepers or strip the idea of its potentially groundbreaking novelty (Perry Smith & Mannucci, 2017: 54; see also Zhou & George, 2001).

These findings also have important societal implications related to poverty alleviation efforts. For example, many NGOs or other organizations enter impoverished contexts and attempt to alleviate poverty through programs titled, ‘EndPoverty’, the ‘Hunger Project’, or ‘End Poverty Now’. My findings point to the potential downside of this, as by telling or otherwise signaling to beneficiaries that they are in receipt of "poverty reduction efforts" these organizations may be cueing a scarcity mindset, thereby reducing beneficiaries’ motivation or confidence to make use of the very supports being provided. On the other hand, and on a more positive note, these findings also point to the potential for organizations to deploy resources more effectively by also attending to the beneficiaries’ resource mindset. Regardless, these findings suggest that the cognitive aspect of poverty alleviation programs is an important and often overlooked aspect of development work. I hope that with this study will call scholarly attention to an overlooked explanatory variable – that of a scarcity mindset – both within and outside of contexts of poverty.

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APPENDICES


Appendix 1. Details of Scarcity and Munificence Games

The scarcity condition game begins with the following scenario: *“Imagine you’re unemployed. You have decided to try a fresh start in a new city and have burned through most of your savings on the move. You and your child are crashing with a friend but need to find a job and a place to live pretty urgently. You’re down to your last \$1,000. Your objective is to make it to the end without running out of money.”* The game then proceeds over a series of eleven days, with each day requiring a decision related to common life choices such as where to live (pay less rent in the outskirts of town or save on gas and live near work); the kind of food to buy (more nutritious and more expensive, or less expensive and less healthy); whether to renew car insurance or risk being pulled over; whether to pay a small amount to open a bank account or simply keep the week’s cashed paycheck on hand. Regardless of the decision, the outcome results in negative economic repercussions, as the game is designed to simulate the “bandwidth tax” from prior scarcity research but in a way that more closely approximates the experience of poverty and allows me to determine whether this state of mind could be induced. Various unexpected negative economic shocks (such as having one’s wallet stolen on payday) were interspersed as well. This diverges from prior scarcity research that has induced scarcity via episodic recall (Roux, Goldsmith & Bonezzi, 2015); hypothetical scenario (Mani et al., 2013); capturing actual shifts in resource position such as pre- and post-harvest (Mani et al., 2013); and behavioral video games such as Wheel of Fortune and Angry Birds (Shah et al., 2012).

Q1  Imagine you're unemployed. You have decided to try a fresh start in a new city and have burned through most of your savings on the move. You and your child are crashing with a friend but need to find a job and a place to live pretty urgently. You're down to your last \$1,000. Your objective is to make it to the end without running out of money.



Condition: Imagine you're unemployed. ... Is Displayed. Skip To: Day 1: Finding a Job You're looking t...

Q2 **Day 1: Finding a Job**
 You're looking through job ads. It seems that your options are limited. Do you go with something that seems more secure, or rely on your personality to (potentially) boost your salary from good tips?



- Apply for a job as a warehouse employee, second shift, for \$9/hour, with shifts from 12pm-8pm.
- Apply for a job as a restaurant server, for \$2.13/hour + tips, with hours that vary.



Condition: Apply for a job as a wareho... Is Selected. Skip To: Congratulations, you got the job at t...



Condition: Apply for a job as a restau... Is Selected. Skip To: Congratulations, you got the job. Peo...


Q3 **Congratulations, you got the job at the warehouse. Make sure you stay healthy—all that lifting and repetitive motion can be brutal on your body. And you have to buy your own back brace.**





\$1,440
-\$216
-\$52 back brace
= \$1,172 Monthly take home pay
= \$293 Weekly pay


In the “munificence” condition individuals began with a different scenario: “*Imagine you are fresh out of high school and ready to move forward with your life. You have lots of important decisions to make as you navigate through life. Time to get started.*” The game had a similar series of decisions, but each was designed to simulate the relatively less taxing decisions of the relatively affluent, with little to no financial repercussions, such as where to go on vacation, what to study in university, and where to do with one’s time after retirement. Similar to the scarcity condition, various unexpected positive economic boosts (such as a promotion or tax return) were interspersed as well. My aim with this condition’s game was not to make the choices and


implications so opulent as to be outside the realm of possibility, but rather to simply convey that participants were selecting from various reasonable options, and that they were making choices that resulted in the accumulation of reasonable levels of wealth and progress through life.


Q1  Imagine you are fresh out of high school and ready to move forward with your life. You have lots of important decisions to make as you navigate through life. Time to get started.


 Condition: Imagine you are fresh out o... Is Displayed. Skip To: Life's more stable when you have a jo...


Q2  Life's more stable when you have a job! Choose CAREER to get your salary sooner or choose COLLEGE to graduate and then start working. College is an investment, but you'll probably end up with a better paying job at the end of it.


 Career


 College


 Condition: Career Is Selected. Skip To: Smart move! You've decided you want t...

 Condition: College Is Selected. Skip To: Smart move! You know the money will c....

Q3  Smart move! You've decided you want to start working right away. Now choose what kind of job you'd like.

 Teacher

 Mechanic

 Musician

Electrician