

The Extent of Biases and Heuristics Affecting Rural Families' Decisions to Run Small Businesses

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Abstract

Rural families living in impoverished conditions and developing nations who wish to start their own businesses are impacted by a multitude of cognitive shortcuts and heuristics. Three heuristics that are relevant to rural families starting businesses are the anchoring, representativeness and familiarity. Through utilizing literature reviews of majorly qualitative and quantitative data, this paper delves into how these biases impact business decision making in rural communities. Additionally, this paper also suggests a span of policies and suggested actions that are intended to assist these communities in making better decisions and stray away from the negative effects of these heuristics.

Keywords

Small Business, Entrepreneurship, Business, Biases, Heuristics, Enterprise, Rural, Start-Up, Venture

1. Introduction

It is known that individuals living in rural areas often “engage in behaviors, such as excessive borrowing, that reinforce the conditions of poverty” (Shah et al., 2012). However, these same inclinations often also let these same individuals make poor decisions when it comes to activities such as starting and running a business. This is highly due to the fact that their cognitive abilities rely heavily on shortcuts such as heuristics. Additionally, many of these “certain behaviors stem simply from having less” (Shah et al., 2012). In other words, being poor or growing in a rural community has an innate effect on individuals and their cognitive biases, which translates into an effect on their ability to start and run a

business in these areas. These heuristics tend to impact a large sector of rural areas due to the fact that individuals who face poverty are often surrounded by individuals who also make poor decisions, creating an environment that does not push them in the right direction and continues the cycle of employing these shortcuts. Overall, the heuristics of anchoring, representative and familiarity play a major role in the abilities of starting entrepreneurs living in impoverished regions.

For some background of heuristics, heuristics are essentially biases and shortcuts that individuals take when making a decision. “Heuristics are compiled hindsight, and draw their power from the various kinds of regularity and continuity in the world; they arise through specialization, generalization, and—surprisingly often—analogy” (Lenat, 1982). They often sway individuals in one way or another, instead of relying on real data and knowledge to come to a decision or come up with a solution to a problem they are facing. However, a common misconception is that decisions made with the heuristic shortcuts are always inefficient. This stereotype is incorrect as there are cases where choices made with the employment of a heuristic are still considered effective. This paper discusses the impact of 3 main heuristics, which will be talked about soon.

This paper will provide an overview of the heuristics that impact business and entrepreneurial decision making in rural communities through utilizing real world and hypothetical instances. Through conducting a detailed analysis of literature and doing a literature review, this paper will delve into the biases along with their origins and impacts. Lastly, the paper will take into account the three main biases in order to make recommendations and changes to the system that is currently in place. These policy suggestions will utilize the heuristics in order to craft recommendations that will be effective in the rural business world. There will be three major heuristics which I believe impact this situation the most included in this paper: The anchoring heuristic, representative bias and the familiarity bias.

For organization purposes, the paper will be sectioned into 4 main categories: Section 1 will discuss the availability heuristic; Section 2 will be about the representative heuristic, Section 3 will be focused on the familiarity bias, and lastly Section 4 will be mainly about the policy suggestions and recommendations that will help alleviate the situation at hand. Each section will have subsections regarding the definition of the bias, the literature review and the impact of the heuristic in the bigger picture.

2. Research Methodology

The research method for this paper is employing the usage of qualitative research, through conducting in-depth literature reviews. Though understanding these literature reviews, there are specific concepts and ideas drawn that correlate with the research question. This methodology will provide us with a clear understanding of how the biases impact behaviour and decision making, when it

comes to starting and running a business in a rural community.

Another method of research present in this research paper is the usage of secondary research, collecting and analysing information from already existing articles, experiments and texts. Through this, we are able to take already existing information, correctly interpret it, and delve into the correlations between those texts and our particular topic.

3. Anchoring

The anchoring heuristic is defined as “anchor(ing) on information that comes to mind and adjusts until a plausible estimate is reached” (Epley & Gilovich, 2006). It is when an individual relies too heavily on an additional piece of information known as the “anchor.” An example of the anchoring bias is showcased when “The results of two sets of experiments indicate that adjustments from self-generated anchor values tend to be insufficient because they terminate once a plausible value is reached” (Epley & Gilovich, 2006). In the entrepreneurial world, the Anchoring heuristic plays a major role in affecting cognitive abilities of individuals along with their decision making skills.

This section of the paper will analyze two different sources: one study discussing the role of overconfidence as an anchor and another set of findings displaying the anchor of loss aversion in the broader context of rural communities. The analysis will then be correlated with how this bias impacts rural communities.

The first study discussed how “Chief Executive Officer (CEO) overconfidence affects profitability” (Kim et al., 2022). The study examines data from the years 1992-2010 in order to determine how changes in stock prices and turnover have a correlation with the amount of confidence that the company’s CEO had for the given years. In this scenario, the sentiment of confidence in the firm’s abilities acted as the anchor. Although in this scenario, there was a positive return, in some years of the data, the stock return turned negative, which was proven to be due to the level of overconfidence in the managerial side of the firm. It is also shown that these changes are primarily due to the overconfidence and anchoring bias instead of other factors because “RNOA is not affected by differences or changes in capital structure because it does not include financial assets in the denominator and deducts operating liabilities” (Kim et al., 2022). While taking into account this study and drawing parallels between communities, it can be concluded that rural communities also face this issue. As individuals decide to initiate their own small businesses in rural communities, due to the lack of education on the concept of entrepreneurship, locals often have overconfidence in their capacities and skills. This is insinuated through the idea that “People are generally overconfident in their self-assessments and this overconfidence effect is greatest for people of poorer abilities” (Miller & Geraci, 2011). Therefore, individuals living in these impoverished areas are often anchored with the idea that their business will operate better than it actually will in reality. The individ-

uals facing the anchor bias are simply “lacking the knowledge of the material, and they lack awareness of the knowledge that they do and do not possess” (Miller & Geraci, 2011). This causes them to make poor decisions and not realize that the heuristic is the cause of their actions. There is also an insufficient adjustment from this anchor of overconfidence in one’s abilities as it does not prompt these individuals to think of a new business practice or method as the “the existing urban-focused programs may be hampered by a lack of involved entrepreneurs who can serve as role models for youths in rural areas” (Kim et al., 2018) and there is an overall lack in entrepreneurial education. Ways to combat this gap in rural communities will be discussed in a later section of the paper.

The next study discusses the concepts of loss aversion and seller behavior. The study employs data and statistics from Boston in the time period of the 1990s that indicate that loss aversion shows the behavior of sellers in the scheme of the housing and real estate market. “Condominium owners subject to nominal losses set higher asking prices of 25 - 35 percent of the difference between the property’s expected selling price and their original purchase price; attain higher selling prices of 3 - 18 percent of that difference; and exhibit a much lower sale hazard than other sellers.” The results from the study showed that the price results were twice the amount for owner occupants in comparison to the investors, but hold for both. Overall, these findings show that sellers are opposed to recognizing their loss and this assists in explaining the relationship of positive price-volume correlation in markets for land, housing and real estate. Similar to this, individuals in rural communities often consider the historical value of land when assessing starting up a new business. To them, that land is believed to have high value and is a valuable asset. Although it is and may be a valuable asset, the value of the land is often depreciated in value and it has no liquidity. Therefore, they overestimate the value of the land in the business making process without accounting for things such as the current dynamics in the market. Another article also represents that “homeowners on average ‘overestimate the value of their properties by about 8%’” (Harney, 2015). Due to this, they overestimate the value of the assets they have, leading them to make poor decisions when starting and running a business of their own. As they may utilize the land for their business, they underestimate the explicit costs of initiating the business, often leading to the downfall of their profit margins. The anchor of the land value causes this poor economic decision in the initial stages of starting the business, later making it hard for the business to be run as it does not generate enough revenue to cover the explicit costs.

4. Representativeness

Next, this section of the paper covers the representativeness bias, which is different from the previous anchoring heuristic. The representativeness heuristic is

understood as “decision-making based on the relationship between two objects (events, processes). In general, people assign an event Y to the event X based on the degree to which Y is representative of X, i.e. how much it resembles X” (Bilek et al., 2018). In simpler terms, this heuristic is when individuals make decisions about the profitability of an event under uncertainty based on how much it resembles existing stereotypes or known examples. This concept is especially prevalent in the business world, increasing its effects in rural communities as they do not have as many stereotypes or representations to go off of. This section of the paper will discuss how this definition of representativeness bias applies to many entrepreneurs in rural areas.

This section of the paper will discuss a separate research study that applies to the success or decline of rural businesses. The study researches the effects of familial roles and traditions on business, which applies to rural business as “87 percent of businesses are family businesses” (Unanue, 2023). The representative heuristic applies to this research and the study being discussed as these family business models serve as the representation of the “idea business.”

Although “more than 2.5 M family businesses generate at least 80% of GDP and create more than 75% of jobs” (Basco & Rodríguez, 2011) in Spain, many of these individual businesses often experience hardships or fail in early stages because of the initial route that they take. This paper discusses the major impact that family and traditions have on businesses. As rural businesses are often family oriented, they often also follow the same processes. The study “used a representative sample of 732 privately owned Spanish family businesses” (Basco & Rodríguez, 2011) in order to show the impact that family business management has on the success of the venture. Although a majority of this paper discusses the negative effects that these heuristics have on rural businesses, there are also positives in some of the shortcuts. An instance of this is seen through the hypothesis that this paper discussing family business management states: “the greater the similarity of a family firm to an ideal profile, the better its performance” (Basco & Rodríguez, 2011). The research and analysis conducted state how oftentimes, the stereotypes individuals in communities refer to often provide them with an exemplar for success. This can also lead to success in the broader picture of entrepreneurship as classifying firms as either familial or not relating to familial traditions allows the business to depend on certain practices. Overall, the representativeness heuristic can lead to a decline in business growth and maintenance if the methods of the representation are outdated and do not apply to the current economic situation and dynamics in the economy. However, if the local example in rural communities has proven to be successful, the example will further assist the owner of the business to prosper and gain the same or similar success. Therefore, the subjectivity of the representation is varied based as stated in the study: “the fit between family and business decisions alters the objectives pursued by a firm, thus making it necessary to qualify the equifinality” (Basco & Rodríguez, 2011).

5. Familiarity Bias

The familiarity shortcut or bias is when “humans are more likely to favor familiar things over unfamiliar things. This means that by becoming more familiar with a person, place, object, or idea, you will naturally become more likely to favor it over alternatives” (Newristrics, 2024). People tend to gravitate to items or concepts that they have encountered before over unfamiliar concepts. This heuristic is especially prevalent in the business world and rural areas due to the lack of education that exists in these communities. This heuristic occurs because “subjects are biased to view less familiar events (and their complements) as less likely than more familiar events (and their complements)” (Fox & Levav, 2001).

This research study using quantitative data that I have chosen discusses how Chinese entrepreneurs in East Asia have achieved notable success using traditional business practices. However, the paper also converses on how these practices may hinder growth and success of the business as well.

As the firms utilize familiar funding and familiar practices, “Overseas Chinese firms’ aversion to outside financing may hinder growth prospects” (Ahlstrom et al., 2004). This was showcased through the quantitative research conducted throughout the paper. Due to resistance to change of familiar methods, “500 fastest growing firms of 1984, ten years later, Inc. found that 233 of those firms were still in business” (Ahlstrom et al., 2004). This means that around half of the original firms went out of business due to the sole reason that they were too acquainted and comfortable in their familiarity with their own business methods. The familiarity bias is not only present in financing as shown in these Chinese traditional businesses in East Asia. There are also other examples of this shortcut such as businesses in rural areas adopting marketing or advertising techniques that they have seen other businesses in the same locality utilize. However, these methods are simply what they are most aware of but not the ones that may be the most effective. This is proven through the rapid development of 21st century technologies that these rural communities are simply not as acquainted with. Resources such as “AI can widen inequality, this because smaller communities may not have access to the same resources...” (Newby, 2023). With the rise of these highly immersive and advanced technologies, rural communities and the start-up businesses in these areas tend to be hindered. Although the ventures may be able to be started, over time, they tend to decrease in growth rates simply due to the vast technological developments in more developed countries. Lastly, another familiarity bias that hinders the growth of rural businesses is that firms in rural areas often default to vendors or suppliers that they already know from personal experience which may rule out any more cost effective or efficient way to receive supply for their startup. This increases their explicit costs while simultaneously increasing the implicit costs of utilizing a certain familiar vendor. Overall, all these instances prove how the familiarity bias often hinders the growth and startup of small businesses in rural or impoverished areas.

6. Recommendations

Policy Recommendations and Changes

Through these qualitative literature reviews and conducting secondary research, we can understand that these three heuristics of anchoring, representativeness, and familiarity often negatively influence the decision making process of rural business owners. Therefore, in order to become more efficient, it is significant that policy changes and recommendations not only take into consideration the heuristic, but also exploit it in order for maximum positive change.

When taking into consideration all the problems that rural communities face with starting and running small businesses, a majority of these issues rise simply due to the lack of a comprehensive understanding of the field. Most of the time, these entrepreneurs consider local models or traditional techniques instead of considering their own experience to make an unbiased judgment. Therefore, a primary concern that should be addressed is the lack of entrepreneurial education. Through increasing entrepreneurial education from a young age and implementing it in the form of a mandated policy for schools and universities, individuals in rural communities would gain a comprehensive understanding of the abilities and skills needed to start and run a small business. The education should have hands-on learning experiences and immersive activities that help students learn instead of simple textbook readings and lectures. In the lessons, heuristics should be taught and methods to avoid the shortcuts as well as being aware of them should also be further discussed. At the same time, in the education services provided, there will be the anchoring heuristic utilized in the education itself in order to exploit the heuristic. For instance, students will receive a “good” example of an anchor business in order to positively shift their ideas. This also applies to representation as they would have an “ideal” representation through the education, employing the heuristic positively. This would help with the recognition of the representativeness heuristic as well as the familiarity heuristic because this way, the owners of these businesses would not have to rely on past successes of others or local models in order to make the right decision for themselves. Implementing simple business courses into schools from K-12 education would highly benefit the outcome of the businesses and the amount of revenue that they generate.

As another large issue lies on the fact that individuals in rural communities assume that assets such as land are more valuable and liquid than they exist to be, a policy that would help rectify this issue is better documentation and information to the land buyers. For instance, the policy could mandate the landlord who is selling the land to give a proper estimation of how much the land value would increase or decrease based on the current economic status at the time. A way to estimate this would be through a government-regulated website or software that utilizes pattern-recognition and formulaic technologies along with economic indicators of the market to estimate land value and liquidity. Through this policy, individuals who buy land and utilize it for initiating their small busi-

nesses will be additionally aware of their financial situation, without over calculating any asset values.

Another policy that would help alleviate the effects of these heuristics on starting and running a business in an impoverished area would be to increase the amount of assistance that small businesses get from organizations similar to the SBA (Small Business Administration) in the United States. Governmental Organizations that are independent agencies such as the SBA can assist small businesses in rural communities with financing and development, as well as Research and Development. Although all developing nations may not have organizations such as these, there are also many Non-Governmental Organizations (NGOs) that can help small businesses with their needs. Starting governmental agencies such as the SBA in developing nations can also assist these small businesses greatly as their progress can be tracked and assisted with.

7. Conclusion

Through looking at the influence of these heuristics and cognitive biases on decision making of families in starting and managing small businesses, there have been multiple insights showcased that represent the immense influence that these shortcuts have on entrepreneurs and their behaviors. By considering the three main heuristics of anchoring, representativeness and familiarity, this paper discusses the challenges that families face, often repeating the cycle of the poor decision making and economic downfall of their start-ups. The findings done through the literature review and analysis of research emphasized the impact of the three biases and their analogous impact in a rural setting. These biases, as shown, can often lead to overconfidence, resistance to unfamiliar information, and a preference for stereotypical representations.

The policies that were discussed attempt to mitigate the effects of these shortcuts and prevent them from occurring in the future. They also present the grounds for more rational economic behavior and decision making in rural areas. Through implementing education programs that develop entrepreneurial experience, business owners can be better informed and have more knowledge to make sound and educated decisions that do not hurt the future of their businesses or careers. This way, they would not be impacted by the heuristics and can be informed of how to avoid the shortcuts. Overall, the implementation of policies that promote accurate assessments and judgements promote more successful futures of individuals living in poverty. The path to rectifying the influence of these cognitive biases has many different facets and takes effort from education, policy makers, and the owners of businesses themselves. This paper not only contributes to the understanding of how the biases impact certain business activities in these communities, but also leads a path to empowering rural families through educated and thoughtful entrepreneurship.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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