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# Do founders attribute their success to skill or luck?

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## Abstract

This study analyzes transcripts derived from 183 podcast interviews that ask successful entrepreneurs whether luck or skill and hard work account for their success. It quantitatively disaggregates founders' answers to this standard question based on differences in their gender, race, and geography of their birth. Qualitative analysis further considers the degree to which founders' perspectives might be associated with an internalized locus of control and their social positioning, alongside their identities and belief systems. Results indicate differences across gender, but no strong evidence of difference was evident by race and geography. Thematic analysis of transcripts revealed several additional determinants that founders attributed to their success. By investigating the lived experiences of successful founders disaggregated by gender, race, and geography, this study sheds light on how diverse founders attribute their success to various internal and external forces.

**Keywords:** Entrepreneurship, Locus of control, Luck, Skill, Intersectionality

## Introduction

At the conclusion of nearly every episode of the popular National Public Radio (NPR) podcast *How I Built This*, the host Guy Raz asks successful founders to consider whether their success was a result of luck or skill and hard work. Was their success a matter of being in the right place at the right time or, assuming luck is hard to come by, was it mainly a result of their grit and perseverance? When two ventures succeed, why does one founder attribute their success to skills and determination while another founder attributes it to luck? The founders' diverse answers to this question illustrate that this query is highly nuanced.

The luck vs. skill continuum has been of long interest to founders and potential investors. Many would-be entrepreneurs do not have formal management training or honed skills in business development when they start venturing. This reality suggests that some element of luck might be in play. But what combination of luck vs. skill and hard work might founders ultimately need to succeed in an entrepreneurial endeavor?

Answers to this query depend partly on founders' definition of luck. People hold several different views of luck. Some see luck as an external, unstable force that changes the outcome of events somewhat at random (Sauder, 2020). Others see luck as a more

reliable force that consistently sways the outcome of events for or against the individual (Darke & Freedman, 1997). A third view of luck reflects a general disbelief in luck, categorizing luck as an internal attribute that people can use, modify, or adapt (Darke & Freedman, 1997).

Explanations of why perceptions of 'luck' differ from person to person may depend on the founders' 'locus of control' (Asante & Affum-Osei, 2019). People's beliefs about luck appear to be socially constructed and differ based on one's identity and experiences. They also seem to influence behavior, as those who see luck as something they possess may be more likely to engage in risky entrepreneurial endeavors (Hisrich et al., 2007).

A second basis explaining differences in the founders' answers may depend on their social positioning. People's belief of luck as internal or external may be informed by their identity groups, such as race (Bruce & Thornton, 2004), gender identity (Swim & Sanna, 1996) or social status (Rotter, 1966). Our beliefs are shaped by where we were born, our families, our education, how we were socialized, and even our genetic makeup—all factors out of our control. Some founders may be more aware of how these early factors have influenced their thought and behavior patterns.

This paper will explore these ideas in greater detail to better understand the nuanced factors influencing entrepreneurial behavior. It will examine the complex relationships between successful founders' perceptions of luck based on potential differences in their identities, backgrounds, and belief systems. In this way, we seek to shed light on how diverse groups of people attribute their entrepreneurial success.

## **Conceptual framework**

### **Diverse perceptions of 'luck'**

As noted in the introduction, people hold diverse perspectives on the meanings and definitions of luck. One view perceives luck as a random and uncontrollable influence that would have little effect on future expectations because it is largely unpredictable. Consistent with this view, Sauder (2020) defined luck as an event that "...involves chance, is consequential (either beneficial or harmful) and is at least partially outside of the control of the person or people affected by it." (p. 195). Therefore, individuals with this view categorize certain events as 'lucky' or 'unlucky' but are unlikely to change their behavior in response to these events due to the belief that circumstances are out of their control. Thus, if they wish to experience another 'lucky' event, acting the same way would not guarantee that the 'lucky' event would occur again.

An alternate view perceives luck as a stable and reliable force that tends to influence events in a person's favor or disfavor. For instance, those who believe in 'good luck' describe luck as a somewhat predictable characteristic that consistently favors some people but not others (Darke & Freedman, 1997). These people see luck "as a stable, internal attribute which they possess" (p. 506). When good luck is viewed as a favorable fate (e.g., "I am a lucky person"), it gives people a sense of optimism that otherwise out-of-their-control circumstances could swing in their favor.

A third perception of luck represents a hybrid of the first two views. This perception may involve some element of chance, but can be heavily influenced by the individual. As Sauder (2020) asserts, this perception of luck more accurately reflects a disbelief in the concept of luck: "Luck cannot be productively reduced to a trite combination of, for

example, hard work and open-mindedness as exemplified in the familiar sayings, ‘luck is what happens when preparation meets opportunity’ and ‘you make your own luck.’” (p. 195). This perception of luck acknowledges the possibility of “serendipity” or helping one’s luck, which is of increasing interest in organizational studies (Hisrich et al., 2007).

This third perspective of “luck” foreshadows its antithesis; the idea that a founder’s success is largely attributed to their skills or hard work. Founders who possess skills associated with entrepreneurial success, or those who can build teams where other leaders possess such skills (see Hobson et al., 2018; Lyons et al., 2020), may or may not recognize other external factors that affect their success, such as environmental conditions, the status of their social positions and resources, networks with other people, being in ‘the right place at the right time,’ etc. Whether or not founders ultimately attribute these external factors to their success may partly be explained by the founders’ inherent locus of control (Asante & Affum-Osei, 2019).

### **Luck and locus of control**

People with a high internal locus of control believe that their life outcomes are largely controllable, and thus seem to view their luck differently than those with an external locus of control. Those with a higher internal locus of control may describe their success as ‘lucky’ but would couch this phrase alongside merit-based descriptions such as “I made my own luck”. In contrast, people with a high external locus of control may perceive luck as unpredictable and largely outside of their control (i.e., luck as chance). They may attribute complex external forces to their success rather than their own actions. It is important to note that binary categories of internality and externality comprise a continuum of locus of control, with most people holding some of both beliefs (Rotter, 1966).

While there are many reasons why people hold different beliefs about luck and control, their locus of control is partially socially constructed (Mirchandani, 1999). Beliefs comprise part of one’s self-concept, which is created and reinforced within an individual’s family, community, and cultural identity groups. Thus, based on one’s intersectional identity and life experiences, people may categorize luck as either an internal attribute, an external causal factor, or a combination of both. These beliefs tend to be self-reinforcing as people code their experiences as lucky or unlucky, and as with-in or with-out their control. Whether or not people consider themselves lucky or unlucky can influence future behavior, which can become further reinforced through thoughts and behavior patterns over time, thus continuing to shape their perceptions of luck across the lifespan (Rotter, 1966).

Rotter’s (1966) theory suggests that locus of control can be influenced by an individual’s intersectional identity, which could partially predict their beliefs about luck. If a person belongs to a group that typically holds an internal locus of control, they may be more likely to believe that ‘luck’ is a skill they possess and can manipulate for their own benefit. In contrast, if a person belongs to a group that typically holds an external locus of control, they may be more likely to believe that, regardless of their skill, external grace or ‘luck’ heavily influenced their success.

This perspective suggests that people with lower socioeconomic status may be more likely to hold an externalized view of luck. While modern society claims to be a meritocracy, where hard work equates to positive socioeconomic outcomes, this reality may

not ring true for those who start with an economic disadvantage. People from low socioeconomic circumstances may consistently experience situations where, after working hard on a repeated task, success is ultimately unpredictable. Assuming they believe in the norm of meritocracy, they would therefore conclude that, “it must not be my own effort that makes the outcome, but rather something beyond me”. Otherwise their hard work would pay off. As this pattern continues to repeat over time, their external locus of control is reinforced and ossified.

Conversely, people with higher socioeconomic status may be more likely to hold an internalized locus of control. The narrative of meritocracy may hold true for many people in privileged groups. When people develop within environments full of resources and high levels of social support, their experiences putting in high effort are more consistently rewarded with positive outcomes. Coming from positions of privilege, these successes often remain unnoticed. As Hulko articulates, those who hold “unearned privileges owing to their Whiteness or straightness, for example, may be extremely reluctant to acknowledge these privileges” (Hulko, 2009, p. 53). These people would logically associate success with their behaviors and hard work, thus reinforcing the idea that ‘luck’ is an internal force within their creation and control. This belief may be socially constructed over a lifetime as others acknowledge and attribute success to their hard work and skills—giving little credit to external forces.

As the theory of locus of control suggests, founders in identity groups with higher privilege may lack awareness about how their privilege opens ‘lucky’ opportunities. To the degree that entrepreneurial success is correlated with hard work (Lyons et al., 2020) this internalized view of luck may positively correlate with entrepreneurial success, and these founders may be more likely to recognize and take advantage of entrepreneurial opportunities than those with a higher locus of control (Asante & Affum-Osei, 2019; Mohd Noor et al., 2021).

Alternatively, founders who come from marginalized social positions may need to work harder to achieve success, so may be more likely than their non-entrepreneurial peers to attribute their success to skill over luck. Founders located in a group with lower social positioning may recognize that ‘luck’ is not on their side from the get-go and thus may be more likely to link their success to their own ability, grit, hard work and tenacity as necessary ingredients to ‘overcome the odds’ against them. While they may believe in an externalized view of luck, they may also have a deeper awareness of the additional hurdles they must overcome to become a successful entrepreneur. Recognizing these additional barriers to success combined with a belief that luck is a random force outside of their control, fewer potential founders from marginalized groups may start a venture.

## **Literature review**

### **Luck and entrepreneurial success**

Few studies have investigated the perceived connection between luck and entrepreneurial success. However, among the few studies that have investigated this question, a study by Liechti et al. found that overall, entrepreneurs ranked ‘luck’ as last among several other potential factors of success—regardless of their personal history and characteristics (2018). However, it is difficult to generalize this study to a broad scope of entrepreneurs because this research focused on financial entrepreneurs and interpreted luck

only from the definitional standpoint of an unexpected and unpredictable component of performance.

Research also suggests that people who believe they have more control over their environment are more likely to undertake a risky endeavor such as entrepreneurship. One of the earliest connections was made by Ahmad Rozelan et al. (2005). This study found that entrepreneurs who have a strong internal locus of control are less likely to believe that their success is attributable to luck. Likewise, the study by Liechti et al., (2018, p. 34) also found that people who place a high priority on luck (as chance) were less likely to pursue an entrepreneurial career. Likewise, Mohd Nood et al. (2021) found that people with a high internal locus of control are more likely to engage in entrepreneurship.

To some degree, findings have been disaggregated by gender and race—though more research is needed on this front. For example, although women seem to hold a more externalized belief about luck than men (Sherman et al., 1997), female entrepreneurs tend to hold a more internalized belief about luck than the general population of women (Kroeck et al., 2010). Another study found that internal locus of control related to women's skills, ability, competency, and hard work were major factors affecting a woman's entrepreneurial orientation (Spillan & Brazier, 2003).

An early study by Swim and Sanna (1996) found that the “performer's gender has little impact on the attributions given for his or her performance” (p. 514). However, this result could be related to methodological limitations based on gendered expectations of their task:

*“The more masculine the task, the more likely that females' and not males' failures will be attributed to the stable causes of low ability and task difficulty, and the more likely that males' and not females' failures will be attributed to the unstable causes of low effort and bad luck” (p. 515).*

As Mirchandani (1999) noted, entrepreneurship is a male-oriented task; thus, gendered societal expectations for entrepreneurs may have an unseen moderating effect on how individuals attribute their success. The most recent study investigating this issue concluded that gender has no controlling influence on the relationship between locus of control and entrepreneurial intention (Arkorful & Hilton, 2022). This study was conducted using university students in the final year of a business degree, and therefore may not be representative of the general population. However, this finding may have also identified a societal shift in gendered expectations among some communities over the last 20 years. All told, scholarly literature demonstrates mixed results on how gender influences people's perceptions of luck on entrepreneurial success.

A similar phenomenon holds true for African American entrepreneurs (Kroeck et al., 2010). These discrepancies may explain why fewer people from communities of color engage in entrepreneurship; a high internal locus of control positively predicts one's likelihood of entrepreneurial engagement (Hisrich et al., 2007; Mohd Noor et al., 2021). It is likely that people who identify as African American tend to feel less control over the course of their lives, thus having a more externalized view of luck than people who identify as Caucasian (Bruce & Thornton, 2004). Findings from these studies are based on the assumed definition of luck as ‘chance’, or luck as an unpredictable part of their environment.

Interestingly, differences in perceptions of luck become relatively equalized when analyzed within entrepreneurs as an analytical category. Groups of people within the entrepreneur demographic who would stereotypically lean toward a more externalized belief of luck, such as women or African Americans, tend to hold a more internalized viewpoint (Arkorful & Hilton, 2022; Kroeck et al., 2010). Thus, trends in the perception of luck comparing entrepreneurs with the general population may not hold as well when assessing entrepreneurs only.

All these findings are somewhat complicated by the various definition of luck described earlier. As noted above, when people hear the word luck, they can have several different interpretations: some of which may ostensibly encourage them to pursue comparatively risky entrepreneurial ventures. It seems that entrepreneurs from a lower social position, who are more likely to maintain an internalized locus of control, tend to perceive luck differently than their non-entrepreneur counterparts who are more likely to externalize their perceptions of luck (Bruce & Thornton, 2004; Rotter, 1966; Sherman et al., 1997). In contrast, if the founders believe they are a 'lucky person'—a perception that could easily be born of privilege—they may be more likely to engage in risky entrepreneurial endeavors (Asante & Affum-Osei, 2019; Byrnes et al., 1999; Hisrich et al., 2007). Thus, it is both one's definition and perception of luck that impact entrepreneurial behaviors, and one's relationship with luck is heavily influenced by their intersectional identity.

Although we present luck and skill as a binary choice, founders attribute their success to several other additional factors, including effort and the perceived difficulty of the task (Darke & Freedman, 1997). Very little research has disaggregated these factors by key demographic groups. However, one study found that resource availability and the presence of strong social supports are two factors that female entrepreneurs consider before starting the entrepreneurial process (Kroeck et al., 2010).

Independent of whether luck is internalized or externalized, we hypothesize that founders who belong to a group with a more favorable 'social position' (i.e., with higher privilege) would be less likely to recognize 'luck' as an external force of privilege that tends to tilt success in their favor. Thus, those in a more privileged position would be more likely to attribute their success primarily to their skills, hard work, and other achievement-based attributes while underplaying the starting advantage they have, which may remain unrecognized. This viewpoint would align with previous findings supporting the premise that those in majority groups hold a high internal perception of luck (Bruce & Thornton, 2004; Rotter, 1966; Sherman et al., 1997).

Taking these ideas under consideration, will women, racial minorities, and other founders in less privileged positions attribute their success to skill or luck and hard work? Previous research shows mixed results. This article seeks to fill this gap by investigating the lived experiences of successful founders disaggregated by gender, race, and global geography. It further nuances these experiences by qualitatively considering how different definitions of luck may impact the founders' perceptions of success.

## Methods

### Study sample

The attribution of founders' perception of skill and luck was assessed using transcripts from the podcast: "How I Built This with Guy Raz", which started in 2016 and is



self-described as, “A podcast about innovators, entrepreneurs, idealists, and the stories behind the movements they built” (NPR, 2021). At the time of the analysis, 335 total episodes had been aired, with 66 reruns, resulting in 269 distinct episodes. Specialty episodes comprised 49 of these episodes and were omitted for lack of relevance to the research question, resulting in 220 episodes included in the analysis. At the conclusion of 183 of these episodes, the podcast host asked these successful entrepreneurs whether luck or skill and hard work account for their success. Although there was some variation in the way the question was worded, the host asked founders, “Do you attribute your success to luck or to skill and hard work”?

### Transcript coding

Two researchers independently coded each transcript of the founder’s answer to the key question using a Likert rating scale where 1 = all luck, 2 = mostly luck, 3 = even split, 4 = mostly skill, 5 = all skill. Coding of these transcripts was based on the totality of a founders’ answer to the question rather than the mere reference to ‘luck’, ‘skill’, ‘ability’, etc. While the coding of transcripts was inevitably subjective, to limit subjectivity, the researchers agreed upon definitions of core concepts such as ‘luck’ prior to coding the transcripts. For example, several founders replied that they “made their own luck” through their effort, perseverance or otherwise. In this case, the founders’ answer was not coded as 1 (i.e., all luck) recognizing that hard work contributed to the ventures’ “luck” in alignment with Sauder’s (2020) assertion that conceptualizing luck as factors within one’s control essentially indicates a disbelief in luck. As noted in Table 1 below, coding consistency across the two researchers was highly reliable, with an inter-rater reliability coefficient of  $\alpha = 0.93$ .

A single researcher assessed and coded the descriptive characteristics of each case for the founders’ gender, age, race, and their geography of origin. The founders are all comparatively well-known figures in their respective industries. However, in cases where specific details such as race, age, gender, and other demographic information were not explicitly mentioned during the conversation, the researchers conducted additional online discovery to provide a more comprehensive understanding of the founders’ backgrounds and to ensure the accuracy of these details based on credible sources and publicly available information. While all of these founders launched their enterprises from the United States, some were born in different countries and chose to immigrate to the US (coded as ‘foreign born’). Each of these coded characteristics was entered into a spreadsheet alongside transcripts of the recordings in preparation for further bivariate analysis. These descriptive statistics are summarized in Table 2.

**Table 1** Interrater reliability analysis,  $n = 183$

	Rater 1	Rater 2	Combined ratings
Mean	3.15	3.03	3.09
Median	3.00	3.00	3.00
Std. deviation	1.13	1.06	1.06
Cronbach’s alpha	–	–	0.93

### Tests of difference

Depending on the group of analysis, the researchers used independent samples t-tests or analysis of variance (ANOVA) to test for differences between groups. Univariate analyses of these variables revealed no serious violation of assumptions of normality or homogeneity of variance.

### Thematic analysis

As noted earlier, this study also sought to qualitatively understand how founders perceived the role of “luck” in their ventures’ success, accounting for various perceptions of external control. We also sought to understand additional factors that founders qualitatively attributed to their success—beyond hard work, skill, and luck. To the degree possible, we disaggregated our thematic analysis by the founders’ gender, age, race, and geography of origin.

## Results

On average across all the interviews, successful entrepreneurs attributed their success to a somewhat equal combination of luck and skill (mean = 3.09), with a normal distribution of answers across the founders’ responses (see Fig. 1). Respondents that fell into the median range were represented by comments such as, “I think we are lucky, but I think

**Table 2** Descriptive statistics of the sample,  $n = 220$

	<i>N</i>	%
<i>Gender</i>		
Male	150	68.2
Female	70	31.8
Non-binary	0	0.0
<i>Race</i>		
White	162	74.3
Black	13	6.0
Asian/Pacific Islander	5	2.3
Hispanic/Latinx	4	1.8
Indigenous American	1	0.5
Other [single] race	13	6.0
Mixed race	20	9.2
<i>Geography of origin</i>		
Foreign born	56	25.6
Born in the US	126	57.5
Unknown	37	16.9
<i>Age group</i>		
21–30	12	5.5
31–40	58	26.4
41–50	54	24.5
51–60	35	15.9
61–70	43	19.5
71–80	16	7.3
81–90	2	0.9



what amplifies that luck and what makes one successful is hard work. It is skill. It is resilience. It is an appetite for risk taking.”

### Quantitative tests of difference

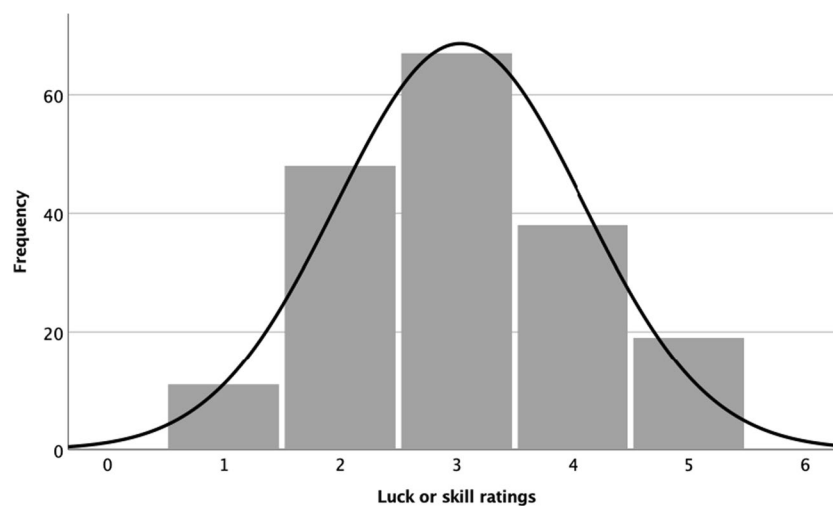
Compared to male founders (mean = 2.97), female founders (mean = 3.37) were statistically more likely to attribute the success of their venture to skill rather than to luck ( $t = -2.39$ ,  $df = 181$ ,  $p = 0.02$ ). No statistically significant differences were found between the four categorical racial groups of White, Black, Mixed race, and Other [single] race ( $F = 1.42$ ,  $df = 6$ ,  $p = 0.22$ ). Likewise, no difference was evident between White and non-White racial categories ( $t = -1.05$ ,  $df = 180$ ,  $p = 0.30$ ) or between Black and White racial categories only ( $t = 1.22$ ,  $df = 148$ ,  $p = 0.22$ ). In addition, no significant statistical differences were evident between founders born in the US compared to founders that were foreign born ( $t = -1.38$ ,  $df = 181$ ,  $p = 0.17$ ), or between the founders' age decade at the time of their interview ( $F = 0.76$ ,  $df = 5$ ,  $p = 0.58$ ).

### Qualitative themes

In addition to general references to skill and hard work or luck, researchers identified five other prominent themes that emerged from the transcripts including: (1) attribution of luck to God, fate, or a higher power; (2) making their own luck by being in the right place at the right time; (3) luck as circumstances of privilege, most prominently including where the founder was born; (4) attribution to the 'luck' of being born to a particular family or parentage, and (5) attribution of success to a broader team beyond the founder's own skill nor luck. We expand the findings from each of these themes below.

### Attribution of luck to a higher power

The first theme that emerged in the transcriptions was a belief among founders' that their success was due to forces beyond their control, such as divine intervention, the blessings or grace of God, or a generalized and unavoidable fate or serendipity. About 7% of all founders referenced the influence of some higher power in their



**Fig. 1** Histogram of skill vs. luck ratings\*. \*Likert rating scale where 1 = all luck and 5 = all skill

venture's success. Importantly, this ratio was higher among founders from a racial minority group. For instance, more than half of Black founders (57%) described the role of a higher power in their venture's success.

This influence was not necessarily religious for some founders but rather based on an astrological birthright or a cosmic fate. For example, one founder stated, "I do think the universe has a big plan for us and you can call it luck, but I think it's even more than that." For others, religion played a part in the process—though combined with a measure of universal destiny. One founder related:

*"When I converted to Judaism...I became acquainted with this concept of Kismet, which is kind of the intersection of luck and serendipity and maybe even some measure of destiny... I think you've got to be open in life to the way that the universe is trying to help you."*

Other founders explicitly referenced the concept of grace or unmerited favor in opposition to random "luck". As one founder stated, "I think having forces come together in a serendipity was indeed an important part of the process...for me because I live in the spiritual world, it's not luck. It's the work of grace." This idea was reiterated by another founder who further attributed their success to explicit guidance from God,

*"You can call it luck; you can call it grace of God. There is no way the path that I had could have happened without that kind of guidance. And because all along the way, there were things way beyond my control."*

As is evident in the quote above, a related subtheme was an assertion by founders that they could not have achieved success by their own efforts. As one founder reflected, "When I look back at some of the critical events that were part of the destiny of this adventure, I certainly couldn't have pulled those off. That had to be luck or divine intervention." Similarly, another founder acknowledged another hand in their work but also recognized that their personal action and listening to their "hunches" also played a critical role:

*"Two things I owe a lot of credit to. I'm a great believer in intuition or God or higher power, whatever you call it. I'm a great believer in listening to my hunches and I couldn't have done it on my own, that's for sure."*

Taking this thought one step beyond intuition, another founder acknowledged the blessings they received but also acknowledged that the venture would not have succeeded if they failed to respond to these blessings through their application of hard work: "I don't think luck had anything to do with it. I do believe that I've been blessed, and I have received those blessings by honoring them with hard work."

Finally, one founder rejected both luck and skill as critical factors in their venture's success. In contrast, this founder believed that their ignorance paired with a trust in God carried their venture to success: "What we didn't know helped us, and we just trust in our God, and we went, and I don't think anything about it was lucky."

### **Founders make their own luck**

In their responses to the hard work vs. luck dichotomy, ten different founders directly referenced the phrase “You make your own luck”. Many additional founders conveyed a similar sense of this sentiment using alternative words and phrases. However, this sentiment was somewhat nuanced with the founders’ locus of control. Although this sentiment conveyed a strong sense of internal control in all its iterations, some founders stated that they were able to jump on a “lucky” opportunity only after that opportunity presented itself. For instance, one founder said, “I think it is more opportunity than it was luck.... an opportunity knocks when that blackberry starts buzzing. You better get your heinie out of bed and get to it.” Or, as another founder stated: “You know what being lucky means? It means having the skill to grab the luck when it’s presented to you.”

Other founders conveyed a similar sense of luck combined with skill and hard work. However, these founders took a more robust position of control. They asserted that their hard work came first—thus setting themselves up to be “the right person at the right place at the right time.” This sense was conveyed in the following quotes: “I think it’s all about making luck happen to you in the sense of positioning your cards right. In the sense of when opportunities present themselves, you either have to decide to go with it or not.” Or, as another founder stated, “People always say that fish don’t just jump in your boat; but what I actually believe is that they do. But here’s the thing: you gotta be out fishing for that to happen, right?” Several founders seemed to believe they only got “lucky” because they first created space for such opportunities: “I definitely believe in luck, and I think that you have to show up to be there, to be lucky.”

To an even greater extent of control, some founders essentially equated being lucky with hard work with a phrase like, “Well, hard work makes luck.”; “My father said the harder I work, the luckier I get.”; or “The success came from the hard work. Luck, we carved out. ...I think you create your own luck.” For many founders, this perception seemed to imply a strong belief in their ability to control their luck through hard work and “staying in play”: “You make your own luck by showing up and fighting for what you believe in and being there.”; or “I think luck is created when you have a dream, you’re willing to work for that dream, you’re willing to work hard. I think luck is a byproduct of just being 100% devoted to never, ever giving up.”

### **Luck as circumstances of privilege**

Some founders immediately turned the question of luck into a recognition of their “extreme level of privilege.” As one founder stated, “It’s 99% luck. And beyond just being wildly fortunate, I’m wildly privileged.” Several of these founders emphasized privilege but also clarified that many people with privilege do not become successful entrepreneurs—thus emphasizing the importance of combining privilege (an issue beyond their control) with hard work (a factor within their control). As one founder articulated, “I’d say that’s a huge amount of privilege that then you can work hard...Privilege has had an outsize impact on my success.”

A subtheme to the issue of privilege was being born at the right time and in the right place. Founders first recognized a “huge amount of luck and privilege and opportunity of where you’re born.” Specifically, several founders mentioned the importance of

the entrepreneurial context of the US: “I think I’m very lucky to be born in the United States.” Other founders viewed place as a fortunate circumstance but also emphasized the importance of time and timing: “I was lucky enough to be born where I was, lucky enough to be born into a time I was born into.”

Leading into the next theme, some founders linked their privilege with their parentage, stating, “It is mostly luck being born to parents at the right time.” For some founders, their parents were in a privileged position to help them. For others, their parents were not necessarily privileged but provided critical support. For instance, “If you think of luck as privilege, then I had a ton of it, you know, to be able to have two parents who loved me unconditionally...”. As a final quote on this theme suggests, the ‘luck as privilege’ theme has many dimensions—very few of which a founder has control over, “I think that if you zoom out of luck and say where were you born? Who were your parents? What was the education you got; did you have good health care? There’re so many layers of luck.”

#### **Attribution of ‘luck’ to family**

As the theme above indicates, founders viewed their parents and other family members as essential elements in the luck equation. As one founder stated, “I think your family really determines your ceiling in life, and your floor as well.” This perception of luck was illustrated in phrases such as, “I’ve been lucky to have amazingly supportive parents.” The associations between luck and family referred to genetics, circumstances of care and being raised in a particular way, as well as the emphasis parents placed on education, risk-taking and other external influences.

First, founders reported owing their inherent intelligence and other aptitudes to their biological inheritance. As one founder stated: “I think that the two really big things that influence your life are the family that you’re born into, and I don’t know what to call it, your DNA, your genetic stock....”

Second, founders reported getting the luck of the draw for parenting skills and care. For example, “I think I’m very lucky to have the family. And if I didn’t have my father and mother raised me the way I did, I would be drunk at a bar, miserable.” These founders reported how their family helped shape their confidence and promote skills and abilities needed for an entrepreneurial spirit. For instance, “I look back at my life and I think being raised by my parents played a large role in who I am as a person today and instilling confidence in me.”; or “I was lucky to have two parents that built me up and gave me confidence and loved me. That is luck! You hit the lottery when you have great parents, right?”

Finally, several founders made explicit connections to their family’s commitments to ensure they received a quality education, often from a young age. For instance, as one founder expressed: “I’m very fortunate to have parents like that who sacrificed a lot to put me in great schools over time.” This attribution was not only associated with parents, but also with other members of the founders’ families.

*“I think we’ve been given an enormous leg up with our families and with mom and dad and now with our wives.... a loving household that valued education that encouraged us to go and take risks and do what we wanted to do.”*

### **Attribution of success to a wider team**

In addition to recognizing the significant influence of familial relationships on the founders' perceived luck, many founders attributed their success to a wider team. As one founder asserted: "I don't want to say I built it, I want to say we built it." Or as another stated, "...more than anything else, it's because of the work of other people that I've been able to do what little that I've done." In some instances, the founders acknowledged the importance of these relationships but ultimately redirected the locus back to their own effort—i.e., choosing to surround themselves with certain kinds of people and therefore somewhat under their control. For instance, as one founder said, "I feel lucky that I have opportunity in my life and that I've surrounded myself with people that care about me... you need to surround yourself with people that believe in you."

In contrast, other founders explicitly separated their own skills, efforts, and intelligence from the contributions of their teams. For instance, one founder articulated, "I would say, definitely not my intelligence and definitely not luck. I would say it was attributed to an incredibly powerful team of passionate people who frankly saw through walls, and we saw a better life." Or, as another founder asserted, "I think the question is less about how much can be attributed to my skill and intelligence, and instead to the skill and intelligence of the hundreds of people who've gotten [my company] to where it is."

Compared with the founders' interpretations of their individual attributes, team-based attributions of skill vs. luck dynamics seemed to focus more on the team's hard work than on their luck. One founder asserted that if their team had not "...toiled at such length, there's not a chance, not a sliver of a chance that we would be here." Or, as another founder answered: "To me, the real heroes are my teammates and the people whose collective hours, skills, hard work, and drive are what has allowed me to be successful today." There were only a few exceptions to the emphasis on their team's skills. For instance, one founder acknowledged how their team was a lucky "blessing": "I did get very, very, very blessed with amazing people who believed in us when there was nothing to believe in and who stayed with us."

### **Discussion**

While these findings provide many points for reflection, they are not without limitations. First, the question asked by the podcast host suffers from limitations with conceptual validity. We do not know how the founders conceptualize "luck". Therefore, making quantitative comparisons across categories of gender, race, and geography has limited reliability. This limitation is particularly challenging because previous studies suggest that people of different genders and racial groups vary in their locus of control (Bruce & Thornton, 2004). In addition, this study does not directly analyze the relationship between locus of control and definitions of luck. The qualitative analysis of founders' nuanced understandings of luck partly helps overcome this limitation. Second, the amount of text available for qualitative analysis was limited. In many cases, founders responded to a single question with few follow-up prompts to clarify or flesh out their answers. Therefore, these findings are quite reductionistic. On the other hand, the data are also tightly focused. A third limitation is that the sample includes only successful founders; thus, findings may not be generalizable to founders of smaller businesses or those that tried but failed the launch a successful venture.

Despite these limitations, quantitative findings reveal several differences worth investigating further. The differences between men and women founders provide further support to previous studies. As previous studies suggest, locus of control is partially socially constructed, which may help explain why women are more likely than men to attribute their success to their own ability, hard work and tenacity. This difference would hold for women who have either external or internal definitions of luck. First, women who hold an externalized view of luck may recognize that predictably bad ‘luck’ is not on their side from the start. These women would have a deeper awareness of the added barriers they must overcome to become successful entrepreneurs—recognizing they would need to work harder to achieve success. Second, women entrepreneurs who empirically hold a more internalized view of luck (see Ahmad Rozelan, 2005; Kroeck et al., 2010) may be discouraged from pursuing risky ventures unless they recognize that they possess an unusually high set of skills, abilities and competencies that could help them overcome otherwise higher chances of failure (Spillan & Brazier, 2003).

By qualitatively fleshing out differences in various definitions of luck by diverse groups of founders, this study fills gaps and provides additional insight to inform previous studies. In the case of gender, our findings suggest that, in addition to their personal qualities associated with an internal locus of control, successful female entrepreneurs may also recognize that they could cultivate an unusually high set of relationships, teams, and networks of other people. The qualitative data were not detailed enough to analyze the degree to which women compared to men perceived these networks as an outcome of their own effort, cultivation, and hard work or whether they would consider their access to these relationships as predominantly random luck (e.g., being born into a family with supportive parents). This question would be an interesting focus for future research.

Like gender, previous research indicates that founders in other socially marginalized groups may recognize that ‘luck’ consistently favors people in less marginalized social positions. As with women, previous research suggests that founders in a racial minority may believe that they need to work harder to achieve success. However, this direction assumes that these founders hold a definition of luck as an external force, which is difficult to parse out. While previous research indicates that African Americans generally tend to feel less control over their lives (Bruce & Thornton, 2004), it also suggests that entrepreneurs have a higher internal locus of control than non-entrepreneurs, even among minority groups (Hisrich et al., 2007; Mohd Noor et al., 2021). In this study, Black entrepreneurs seemed more likely than other founders to attribute their success to fate or the intervention of a higher power. This attribution is generally consistent with previous findings that people in lower socioeconomic positions hold an externalized view of luck. Quantitative findings of no difference between racial groups in this study may be due to the sample’s comparatively small number of Black and minority founders. The numbers in each group may not have enough statistical power to identify significant differences between groups. The same may be true of founders from different global geographies. Future research may further investigate why many Black founders seem to attribute their success to an external force—though they may not necessarily describe this force as ‘luck’.

The assertion by many founders that they “make their own luck” generally aligns with the third conception of luck described in previous studies (i.e., reflecting general disbelief

in luck) (see Hisrich et al., 2007). However, qualitative comments suggest that the intersection between this description of luck and the founders' locus of control is nuanced. Some founders described this as an external opportunity that presented itself, and which they actively chose to act on post-factum. Alternatively, some founders described how they first mobilized their own internal attributes, including their capacity for hard work and tireless labor, which then set the stage for unpredictable but lucky future opportunities. Both perspectives illustrate a situation where hard work meets opportunity—but only one illustrates how preparation meets opportunity. Unpacking how this nuance affects entrepreneurial intention and success may also deserve added attention in future research.

Finally, the theme of “luck as privilege” may deserve additional attention. The number of founders coded to this theme was insufficient to make definitive conclusions based on disaggregation by gender, race, or other groups of potential privilege. Based on previous studies, we had assumed that founders with higher privilege might lack awareness about how their privilege opens ‘lucky’ opportunities—most of which the founders have control over based on mere advantages of birth, family, or otherwise. On a case-level basis, many founders that would ostensibly be considered privileged by their gender and race (i.e., white males born in the US) recognized the critical importance that their parents and family played in their success. However, few explicitly acknowledged their gender, race, or the geographical advantages of being raised in the US. The connection between geographical privilege and founders' perceptions of entrepreneurial success may also be a helpful area for future research.

## Conclusions

This research investigated the question: What combination of luck vs. skill and hard work might help founders succeed in an entrepreneurial venture? As findings from this study suggest, the answer to this question is nuanced. Founders' perceptions and definitions of luck vary substantially, and are heavily influenced by their backgrounds, world-views, and internal perceptions of control. More to the point, the skill vs. luck binary is limited and tells only part of the story. While discussions often position these variables along two ends of a spectrum, findings from this study illustrate many of the gradients between skill and luck. The constructs of skill and luck, and the gradients in between, appear to be influenced by other distantly related variables.

For some founders, interventions from a higher power are anything but luck—even if recognized as outside of their control. For other founders, the question of skill vs. luck is largely irrelevant; neither contrasting idea represents a logical conclusion as they work to “make their own luck” by skillfully positioning themselves in the right place at the right time to take advantage of fortunate opportunities. Still other founders humbly acknowledged that they played only a minor role in their venture's success, mainly attributing its fortune to other people's work. Whether these founders take responsibility for skillfully gathering a competent team around them, or whether they consider their relations with this team a lucky happenstance, remains an open question.

Founders from different identity groups also seem to congregate around answers to these questions in intriguing ways. Female founders held a stronger belief that internal factors such as their skills and hard work were central to their success, while founders



from a racial minority group seemed more likely to attribute their success to an external higher power. These differences complicate, but do not necessarily contradict, theoretical connections linking entrepreneurial success to locus of control. While social position certainly matters, it is only one of the many factors which influence a founder's internal perceptions of control. Additional factors, such as culture, education, and channels of privilege, all work together to guide a founder's entrepreneurial journey of success or failure.

#### Abbreviations

NPR	National Public Radio
ANOVA	Analysis of variance
Df	Degrees of freedom
US	United States

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#### Author contributions

AM collected and transcribed the transcripts used in the analysis. AM and BL contributed equally to the analysis and writing of the article. All authors read and approved the final manuscript.

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#### Availability of data and materials

The dataset used for the current study is available from the corresponding author upon reasonable request.

#### Declarations

##### Competing interests

The authors declare that they have no competing interests in the publication of this study.

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