

# Will It Be a Unicorn or a Zebra?

## What the Characteristics of Founders Reveal About Their Ambitions

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### Abstract

Entrepreneurship, and thus the founding of new and innovative companies, plays a decisive role in developing an economy and society. The key drivers are the founders themselves, who set up these new companies and the goals and ambitions they pursue. These ambitions are directly influenced by the personal traits and characteristics of these founders, and these subsequently determine the development of their companies. Will they become a million-dollar *Unicorn* or a sustainable *Zebra* in the context of a startup classification? In this article, we explore this question and clarify which characteristics of founders affect their ambitions and how these correspond to a classification of certain startup types. Based on three consecutive surveys (n = 1,985 startups), this study investigates the impact of (1) gender and (2) culture as personality-related aspects, and (3) risk propensity as a behavior-related aspect on (4) startup types (differentiated in entrepreneurial ambitions). For research, the founding and development of startups and the associated focus on entrepreneurial typology have theoretical and practical implications.

**Keywords:** entrepreneurship, ambitions, startups, diversity, gender, culture, risk

### 1. Introduction

The link between entrepreneurship and economic growth is proven in many studies (Audretsch & Keilbach, 2004; Caree et al., 2002; Iyigun & Owen, 1999; Verheul & Van Mil, 2011). Entrepreneurship has an essential economic value regarding employment, innovation, utility, productivity, and growth (Van Praag & Versloot, 2007). For instance, most new jobs are created by a small group of new entrepreneurs (Autio, 2005, 2007; Verheul & Van Mil, 2011). In this respect, founders play a crucial role in the entrepreneurial firm that lasts long after the business has been established (Franco et al., 2014; Krueger & Carsrud, 1993; Schein, 1983). The term “founder” is defined as “a person who has founded his or her own firm” (Begley & Boyd, 1987; Franco et al., 2014, p. 270). Accordingly, founders start a new business from the beginning, are not supervised, and have control over their entire company, which includes the management (Franco et al., 2014).

Entrepreneurship and its founders involve various circumstances, genders, cultures, and prospects (Global Entrepreneurship Monitor, 2025). They differ, like all humans, in their characteristics, such as gender, age, education, risk propensity, origin, and culture (Global Entrepreneurship Monitor, 2025; Hirschfeld et al., 2024; Kollmann et al., 2016, 2022, 2023; Kollmann, Kleine-Stegemann, Then-Bergh, & Harr, 2021). This is why “no monolithic figure of the ‘entrepreneur’” exists (Global Entrepreneurship Monitor, 2025, p. 43). Research has identified, i.a., (1) gender, (2) cultural background as personality-related, and i.a. (3) risk propensity as behavior-related key characteristics of entrepreneurship (Ahl, 2006; Ahl & Marlow, 2012; Brockhaus, 1980; Hvide & Panos, 2014; Kontos, 2003; Macko & Tyszka, 2009; Naud é et al., 2017; Sullivan & Meek, 2012), which are described in the entrepreneurial context below.

First, research identifies in relation to personality-related aspects a few notable differences in the strategies of female- and male-led companies (Jennings & Brush, 2013). Regarding their personality and professional profiles, women and men entrepreneurs distinguish themselves (Carter et al., 1997; Chaganti & Parasuraman, 1997; Verheul et al., 2006). In contrast to men, women have particular entrepreneurial skills and priorities: They create various products and services, organize their companies differently, found and manage ventures in different industries, and aim for diverse targets (Verheul et al., 2006). Moreover, enterprises run by women are more likely to strive for both

social and economic goals than those managed by men (Jennings & Brush, 2013). Women-led businesses are generally less successful because of fewer working hours, less founding capital, and less previous work experience in comparable enterprises (Fairlie & Robb, 2009). They are less business angel and venture capital financed, and an IPO is not their primary focus (Jennings & Brush, 2013). Females choose limited business growth deliberately (Cliff, 1998; Morris et al., 2006; B. Orser & Hogarth-Scott, 2002; Wang et al., 2019) and they are significantly weaker in pursuing high-growth ambitions than male entrepreneurs (Davis & Shaver, 2012; Estrin & Mickiewicz, 2011; Puente et al., 2017; Wang et al., 2019). Hence, female and male founders pursue, in general, different ambitions for their startups (Fairlie & Robb, 2009; Verheul & Thurik, 2001).

Second, research investigates, in relation to personality-related aspects, further the relationship between migration and entrepreneurship (Baycan-Levent & Nijkamp, 2009; Naud é et al., 2017; Portes & Yiu, 2013), as the topic is at the center of many national and international discussions (Naud é et al., 2017). Migration and cultures have the power to be a force for development (Çelikkol et al., 2019; De Haas, 2010; Naud é et al., 2017; Sinkovics & Reuber, 2021). Since migrants are often discriminated against in the job market, they are often drawn toward self-employment (Bruder & R ähke-D öppner, 2008; Naud é et al., 2017). Entrepreneurial activity is frequently determined by the founders' values, such as religion and spirit/spirituality (Balog et al., 2014; Kinjerski & Skrypnik, 2004). Because the founders' value system and beliefs impact the company's output (Balog et al., 2014; Hambrick & Mason, 1984), culture and religion significantly affect the entrepreneurial mindset, decisions, and output (Balog et al., 2014; Henley, 2017, 2022).

Third, research recognizes, in relation to behaviour-related aspects, the risk propensity as an essential factor in entrepreneurship (Brockhaus, 1980; Hvide & Panos, 2014; Vereshchagina & Hopenhayn, 2009). Since risk is an extensive area of entrepreneurship literature (Das & Teng, 1998), it is a crucial element in many entrepreneurship theories (Hoogendoorn et al., 2019). The strength with which entrepreneurs strive for growth depends on their willingness to take risks (Davidsson, 1989; Stam et al., 2012). Hence, different levels of risk aversion exist, which have an impact on self-employment (Caliendo et al., 2009) and entrepreneurs' ambitions (Bager & Sch øtt, 2004; Cassar, 2007; Verheul & Van Mil, 2011). For instance, more risk-tolerant entrepreneurs pursue higher ambitions to grow their companies (Bager & Sch øtt, 2004; Cassar, 2007; Verheul & Van Mil, 2011).

Overall, the entrepreneurial background and individual attributes determine the founders' ambitions regarding the direction in which they want to develop their companies (Davidsson, 1989; Wallin et al., 2016). This developmental direction of the company is based on entrepreneurial ambitions and leads to various startup types (Kollmann & Pr öpper, 2025). The founders' ambitions equate with those of their startup (Hambrick, 2007; Hambrick & Mason, 1984) so that different ambition types can be formed. These ambition types are referred to as startup types, such as *Unicorns* and *Zebras* (Kollmann & Pr öpper, 2025).

The diversity of differences and variations that make up entrepreneurship must be further observed, evaluated, and understood. In this regard, entrepreneurship remains in a deeper research phase. There is a lot, but not yet complete knowledge about entrepreneurship to close off one facet. Differences are relevant, so they need to be actively sought out to answer questions about where, when, and why these variations exist. Gaining comprehensive, valuable insights into the phenomenon of entrepreneurship depends on where we look and what limitations we accept when deciding what is interesting and valuable. Accordingly, the variety of entrepreneurship should be fully recognized and not limited to an exclusive meaning because there is no single optimal approach or perfect archetype of a founder (Welter et al., 2017). We consider further investigation of startup types necessary (Kollmann & Pr öpper, 2025).

To understand entrepreneurial diversity (Kuratko & Audretsch, 2022; Morris & Kuratko, 2020; Welter et al., 2017), we ask ourselves what leads to different startup types based on entrepreneurial ambitions. We want to answer this overarching question using two personality-related aspects and one more behavior-related aspect as examples, which we have already highlighted above as particularly relevant based on the literature. Because of the awareness of the gender distribution, migration/culture, and risk propensity among founders in entrepreneurship research (Cassar, 2007; A. Elam et al., 2023; Honig, 2020; Hvide & Panos, 2014; Stewart Jr. & Roth, 2001; Verheul et al., 2006; Verheul & Van Mil, 2011), we contemplate it relevant to investigate their influence. Specifically, we analyze the relationship between the founders' characteristics and startup types. Therefore, we pose the following personality-related research questions:

1. How does the founders' gender influence the formation of startup types (differentiated in their entrepreneurial ambitions)?
2. How does the founders' culture/migration background influence the formation of startup types

(differentiated in their entrepreneurial ambitions)?

In order to obtain further justification for the causal relationships of the above research questions, we conduct a post-hoc analysis with the following behavior-related research:

3. How does founders' risk propensity influence the formation of startup types (differentiated in their entrepreneurial ambitions)?

To answer these research questions, our study is based on the already existing "Startup-Zoo-Framework" proposed by Kollmann & Pröpper (2025), whose antecedents we investigate in our study. Kollmann & Pröpper (2025) contribute to the diversity of entrepreneurship by deriving four startup types from entrepreneurial ambitions that differ in content and strength. They empirically confirm the existence of two known startup types, *Zebra* and *Unicorn*, and discover two more types in between: *Cow* and *Horse*. To investigate these startup types, Kollmann & Pröpper (2025) focus on the three most dominant entrepreneurial ambitions in research, which vary in strength: Growth, exit, and cooperation ambitions.

Growth ambitions are a widely held and relevant preference of entrepreneurs because of their connection with success (Galloway & Mochrie, 2006; Gundry & Welsch, 2001). They are typically classified into low- and high-growth ambitions (Bosma & Schutjens, 2009; Gundry & Welsch, 2001). For instance, success factors result from high-growth ambitions, such as the company's good reputation and management, the importance of product quality, and sufficient liquid funds. Other effects include market expansion, technological transformation, the seeking of funding options, and organizational progress (Gundry & Welsch, 2001).

The question of whether the founders pursue owning or exiting their enterprise is also a critical ambition for the future of the business (Dawson et al., 2018; Wennberg et al., 2010). DeTienne, p. (2010, p. 203) consider an "entrepreneurial exit as a critical component of the entrepreneurial process" with "a significant effect on firms, industries, and the economy." To maintain the company as the founder(s) also have advantages, such as control over decisions and the company (DeTienne, 2010).

Moreover, entrepreneurs have a more cooperative or competitive interpretation of the market (Rezazadeh & Nobari, 2018; Teece, 1992). Cooperation ambitions are, for example, beneficial to gain access to resources for innovation (Gallego et al., 2013), but not every entrepreneur pursues cooperation. Some seek more competition (Teece, 1992), e.g., for pushing their products and sales (Porter, 1980) or innovation (Aghion et al., 2005).

The presented entrepreneurial ambitions could be impacted by the personality-related and behavior-related founders' characteristics of (1) gender, (2) culture/migration background, and (3) risk propensity (Davis & Shaver, 2012; Serrie, 1998; Verheul & Van Mil, 2011).

To investigate these relationships, based on the three research questions outlined above, our study examines the summarizing research question: Is there a predisposition in the characteristics of founders that leads to certain startup types through the associated entrepreneurial ambitions?

To answer the basic and summarising research question/s, we conducted a repeated cross-sectional study, conducted over three consecutive years, which features a comprehensive survey of 1,985 startup founders (Kollmann & Pröpper, 2025). To answer our research questions, we conduct regression analyses.

Our research contributes to entrepreneurship research in several ways.

First, we contribute to the literature on gender issues in entrepreneurship (Ahl, 2006; Hughes et al., 2012; Poggesi et al., 2015; Verheul et al., 2006; Welter et al., 2017) by providing and explaining valuable insights into the determinants of female and male entrepreneurial activity. Addressing the call of Welter et al. (2017), we consider it relevant to investigate the diversity of entrepreneurship, which includes female and male entrepreneurs. Women entrepreneurs are essential in their relative numbers (i.e., the share of women in the total number of founders) and their contribution to the diversity of the entrepreneurial landscape (Verheul et al., 2006).

Second, we contribute to the literature on migration entrepreneurship (Harima, 2022; Honig, 2020; Naudé et al., 2017) by investigating the relationship between founders' culture and migration background and their pursuit of different startup types. Kollmann & Pröpper (2025) confirmed the same startup types for founders with and without a migration background. However, migration is a significant variable that influences the distribution of founders and their startups in the startup classification. We answer questions like: Are migrant entrepreneurs seeking more or less ambitious startup types in contrast to natives? In addition to the principal analysis, we conduct a post-hoc analysis for further insights.

Third, we contribute to the literature on risk in entrepreneurship (Caliendo et al., 2009; Das & Teng, 1998; Forlani &

Mullins, 2000; Van Gelderen et al., 2005) by exploring how different levels of risk propensity impact startup types, which are differentiated in the content and strength of entrepreneurial ambitions.

Overall, our study contributes to the literature on startup types and entrepreneurial diversity (Aldrich & Ruef, 2018; Kollmann & Pröpper, 2025; Kuckertz et al., 2023; Kuratko & Audretsch, 2022; Welter et al., 2017) by examining more average startups in addition to the extreme poles of startups. This provides a comprehensive view of the entrepreneurial ecosystem and contributes to understanding the diversity of entrepreneurial nature (Kuratko et al., 2015; Morris & Kuratko, 2020).

Against this background, this paper is structured as follows: Section 2 presents the theoretical background of startup types, entrepreneurial ambitions, and founders' characteristics. Section 3 derives the theoretical framework and hypotheses for the personality-related and behavior-related items. Section 4 describes the method used. Section 5 investigates the hypotheses, followed by an in-depth interpretation and a post-hoc analysis. Section 6 offers our study's conclusion, implications, limitations, and future research directions.

## 2. Theoretical Background

This section first presents the theory of startup types and entrepreneurial ambitions. Subsequently, it provides an overview of the founders' characteristics, which we consider essential in entrepreneurship.

### 2.1 Startup Types

One elixir of an economy are startups (Morris & Kuratko, 2020). In the past, entrepreneurship research for the masses diminished and concentrated on a few (Kuratko & Audretsch, 2022). Thus, entrepreneurship research focused firmly on extreme venture types (Aldrich & Ruef, 2018; C. Bock & Hackober, 2020; De Massis et al., 2016; Kenney & Zysman, 2019; Venâncio et al., 2023), but all types are relevant to the economy (Kuratko & Audretsch, 2022; Morris & Kuratko, 2020). Hence, it is a fallacy to investigate a single form of entrepreneurship (Kuratko & Audretsch, 2022; Morris & Kuratko, 2020). Little is known about the different types of entrepreneurship and their interactions and linkages in research (Kuratko & Audretsch, 2022). In this respect, entrepreneurship research is perceived to be at a turning point: It either will concentrate on the mass and diversity of entrepreneurial forms or the few most successful and prominent types (Kuratko & Audretsch, 2022). Therefore, entrepreneurship research calls for exploring more startup types than the extreme poles (Aldrich & Ruef, 2018; Kuckertz et al., 2023).

Kollmann & Pröpper (2025) followed this research call and filled this gap. They published their framework "Startup-Zoo," presenting startup types based on entrepreneurial ambitions. They consider the founders' ambitions as equivalent to those of their startup (Kollmann & Pröpper, 2025) because an enterprise is the reflection of its leader(s) (Hambrick, 2007; Hambrick & Mason, 1984). Besides the most prominent types of startups, *Zebra* and *Unicorn*, they detected two further forms between, *Cow* and *Horse* (Kollmann & Pröpper, 2025), which are described in the following.

1. *Zebras* seek sustainable growth with a long-term increase in value. The founders and their majority ownership are in the foreground of the enterprise's development. They take their cue from the "all-take-it-all market" symbol, in which they are open to cooperation and accept mutual competition and participants accept the survival of many companies (Kollmann & Pröpper, 2025).
2. *Cows* seek medium-term and moderate growth. In doing so, they want to grow faster than *Zebras*. They are also oriented towards the founders' strong ownership. In addition, they are open to cooperation and engage in "many-takes-it-all markets," which connote that for many market participants, many shares on the market exist but fewer shares than in "all-takes-it-all markets" (Kollmann & Pröpper, 2025).
3. *Horses* strive for strong and short-term growth. They seek a strong investor-related exit. Moreover, they are open to cooperation with other enterprises and thus accept other competitors in their market, but they are less open than *Zebras* and *Cows*. Therefore, they operate in "some-takes-it-all markets," in which just a few market participants outlive and divide the market among themselves (Kollmann & Pröpper, 2025).
4. *Unicorns* aim for short-term exponential growth and increase their venture as quickly as possible. A fast, strong exit orientation and a harsh competitive positioning against competitors portray them. Therefore, they are active in "winner-takes-it-all markets," in which competition is powerful, so others have to be pushed out of the market (Kollmann & Pröpper, 2025).

## 2.2 Entrepreneurial Ambitions

Entrepreneurial ambitions are the most relevant factors for startup success (Estrin et al., 2017; Hermans et al., 2012; Stephan et al., 2015; Wong et al., 2005). In this context, entrepreneurs need ambitions leading to success (Estrin et al., 2017; Hermans et al., 2012; Stephan et al., 2015; Wong et al., 2005).

Ambitions are an entrepreneurial value, refer to long-term goals, and represent visions of the future for oneself (Kirkley, 2016). Goals and visions are diverse, but both pursue a future state that a person or group wants to accomplish (Frese & Gielnik, 2014; Kirkpatrick & Locke, 1996). “A goal is the object or aim of an action, for example, to attain a specific standard of proficiency, usually within a specified time limit” (Locke & Latham, 2002, p. 705). A vision represents a clear idea of what is to be achieved in the future and the resulting company’s performance (Hannah & Eisenhardt, 2018). Entrepreneurs create visions for their unknown future (Sarasvathy, 2001; Wood et al., 2021) of what they want their startup to look like in the future and what they want it to achieve (Nelson, 2003; Robbins & Judge, 2013).

In addition to ambitions, other constructs such as aspirations, expectations, willingness, passion, imagination, and intentions exist (Dutta & Thornhill, 2008; Hermans et al., 2015; Kolvereid, 1992; Lecuna, 2024; Newman et al., 2021). We consider entrepreneurial ambitions representative of these terms, so we use them synonymously in this study, as this paper is not intended to distinguish between them.

Since startups differ in their needs and thus have to be considered differently (Wallin et al., 2016), Kollmann & Pröpper (2025) identified three entrepreneurial ambitions - growth, exit, and cooperation - that are central to every startup and can vary in their strengths. These entrepreneurial ambitions are described in the following:

The choice for lower or higher growth is related to the entrepreneur’s growth ambitions (Gundry & Welsch, 2001; Wallin et al., 2016). To bring ambitions and growth together, research literature uses various terms: growth ambitions (Gundry & Welsch, 2001), growth aspirations (Kolvereid, 1992; Wiklund & Shepherd, 2003), growth willingness (Davidsson, 1989), growth intentions (Cassar, 2006), growth preferences (Cassar, 2007), and attitude toward growth (Cliff, 1998; Wiklund et al., 2003). These terms redound to understanding “why and how entrepreneurs seek (or do not seek) high growth” (Wallin et al., 2016, p. 7). Entrepreneurs may aim for growth as an increase in the number of jobs, growth by expanding to global markets, and/or increasing their customers (Wallin et al., 2016). Hence, growth ambitions are of central importance for business, but high- and low-growth-oriented entrepreneurs differ. The term “growth ambitions” refers to entrepreneurs who plan enterprise growth earlier, have a more substantial commitment to the company’s success, pursue strategic goals for market growth and technology changes, have a more significant propensity to make sacrifices for the company, command adequate capital resources and decisive leadership, and caring about image and quality. Ambitious entrepreneurs are more motivated to succeed (Gundry & Welsch, 2001). However, other entrepreneurs seek to grow their business low or moderate (Davidsson, 1989; Wallin et al., 2016), for instance, because of the fear of control loss (Davidsson, 1989).

Moreover, entrepreneurs pursue ownership (Choi et al., 2015; Dawson et al., 2018) or an exit (Jayawarna et al., 2021; Wennberg et al., 2010). In this context, many enterprises are led by one shareholder (e.g., the founder) and/or his family, called “family firms.” At some point, the founder may no longer want to run the company (Burkart et al., 2003). Then, he aims to leave entrepreneurship and exit his enterprise, for instance, as an indication of success (Lindblom et al., 2020; Wennberg et al., 2010). The entrepreneurial exit is “the process by which the founders of privately held firms leave the firm they helped to create; thereby removing themselves, in varying degree, from the primary ownership and decision-making structure of the firm” (DeTienne, 2010, p. 203). If an entrepreneur plans to exit his/her company, this can be considered both a career choice and the liquidation of a financial investment (Wennberg et al., 2010). An exit is relevant for companies, industries, and the economy (DeTienne, 2010) and not synonymous with success or failure (Gimeno et al., 1997; Wennberg et al., 2010).

Furthermore, entrepreneurs seek cooperation or competition (Fernandez-Guadafío et al., 2020; Hannah & Eisenhardt, 2018). The definition of cooperation is “firms jointly pursuing mutual interests and common benefits” (Hannah & Eisenhardt, 2018, p. 3164). In contrast, competition is defined as “the pursuit of a market position by firms that offer comparable products to a targeted set of customers” (Hoffmann et al., 2018, p. 3033) and, thus, “pursuing their own interests at the expense of others” (Hannah & Eisenhardt, 2018, p. 3164). In the cooperative mindset, individuals are convinced that goals are positively linked to those of others, with success as a result. In the competitive mentality, humans believe that their goals have negative connotations to those of others. As a result, their success impairs that of others (Deutsch, 1990; Tjosvold & Weicker, 1993).

### 2.3 Founders' Characteristics

We consider the personality-related items “gender” (Gupta et al., 2009; Liñán et al., 2022), migration/cultural background (Honig, 2020; Yang & Zhang, 2023), and the behavior-related item “risk propensity” (Hvide & Panos, 2014; Macko & Tyszka, 2009) as examples of essential founder characteristics from the literature, whose theoretical background is presented in this chapter.

#### 2.3.1 Gender

Women entrepreneurs are an essential and unrecognized driver of economic growth (Hughes et al., 2012; Reichborn-Kjennerud & Svare, 2014; Verheul et al., 2006). This is why research on women’s entrepreneurship contributes to the diversity of the entrepreneurial landscape (Verheul et al., 2006) and academics have attempted to understand the growth and performance of women-owned businesses (Hughes et al., 2012; Reichborn-Kjennerud & Svare, 2014).

Since 2000, a development in the debate between gender and entrepreneurship has been recognized (Poggesi et al., 2015). Gender is the term to differentiate “between biological sex (human bodies with male or female reproductive organs) and socially constructed sex, i.e., social practices and representations associated with femininity or masculinity” (Ahl, 2006, p. 596). We follow research suggestions to use the term “gender” in the same meaning as “biological sex.” This refers to the differentiation between men and women, who differ in essential aspects (Ahl, 2006). Hence, gender states to socially generated and learned behaviors that result from being a man or a woman (Poggesi et al., 2015). In social stereotypes, men are usually described as more “agentic” (Gupta et al., 2009, p. 399), “independent, courageous, aggressive, or autonomous” (Liñán et al., 2022, p. 1053), while women are more “communal” (Gupta et al., 2009, p. 399), “caring, supportive, kind, or expressive” (Liñán et al., 2022, p. 1053). “The process of females starting new businesses that promotes both personal and financial development” (Alhajri & Aloud, 2024, p. 383) is called female entrepreneurship.

Despite the contribution of female entrepreneurs to economic growth (Hughes et al., 2012; Reichborn-Kjennerud & Svare, 2014; Verheul et al., 2006), women are underrepresented in entrepreneurship (Jennings & Brush, 2013; Verheul et al., 2006; Verheul & Thurik, 2001; Wang et al., 2019). Furthermore, there are hidden gender biases in the entrepreneurial discussion. Entrepreneurship is a male-gendered term because of the masculine description of the term “entrepreneur” (Ahl, 2006). Accordingly, women are portrayed as incomplete men (Ahl & Marlow, 2012) and as disadvantaged by equating the characteristics of men with the preferred entrepreneurial characteristics (Ahl, 2006; Jayawarna et al., 2021). They are attributed to a lack of entrepreneurial inclination and lower performance profiles, which is seen as a gender-specific problem of empowerment and attitude (Ahl & Marlow, 2021; Jayawarna et al., 2021). Such statements have been criticized in research as they put women at a disadvantage (Ahl, 2006; Jayawarna et al., 2021; Jennings & Brush, 2013). Most studies conclude that companies owned by women perform worse than male-owned companies (Fairlie & Robb, 2009; Fasci & Valdez, 1998; Robb, 2002). The task is to encourage more women to become entrepreneurs by providing them with tailored support to develop personalized support to overcome structural obstacles (Ahl & Marlow, 2021).

In the literature comparing the performance of female-owned and male-owned businesses, major schools of thought seem to be prevalent. Liberal feminism expresses that women and men are equally competent (Ahl, 2006; Fischer et al., 1993; Robb & Watson, 2012) and are assumed to be equal in their rational capacity. Because rationality has no physical ground, physical differences between the genders are considered meaningless (Fischer et al., 1993). If women underperform men, it is due to essential resources denied to women (e.g., lack of adequate education) and/or discrimination (e.g., by lenders). Studies with a liberal feminist perspective usually try to explain the poor achievement of female-owned companies in contrast to male-owned companies based on potential discrimination (Ahl, 2006; Fischer et al., 1993; Robb & Watson, 2012). It is possible to remove some or all of these barriers. The unspoken male perspective in this theory has been criticized. Rather than questioning, for instance, bureaucracy and leadership, they recommend that women conform to the existing social order (Ahl, 2006). Overall, companies perform equally well regardless of whether they are owned by women or men, without discrimination (Robb & Watson, 2012).

Social feminist theory has a different approach that does not attribute differences in performance between women and men to discrimination. In this view, men and women are naturally divergent (Ahl, 2006; Fischer et al., 1993; Robb & Watson, 2012) because they have different traits and experiences in life. For society, there is no assumption that either the women or the men are considered inherently superior or more productive (Fischer et al., 1993). Because of the gender differences, they run their business differently (Ahl, 2006; Fischer et al., 1993; Robb & Watson, 2012). For example, women choose different courses of study or pursue different majors/degrees (Robb & Watson,

2012), are less likely to apply to a financial institution for money (Watson, 2006; Watson et al., 2009), grow their enterprises more sustainable (Cliff, 1998; B. Orser & Hogarth-Scott, 2002), and achieve a better work-life balance compared to men (Boden, 1999; Buttner & Moore, 1997; Jennings & McDougald, 2007; Kepler & Shane, 2007). Female characteristics are viewed as advantages rather than disadvantages. These strengths should be applied in practical ways (Ahl, 2006).

In the social constructionist and poststructuralist feminist theory, it is not about what men and women are like. Commonalities and dissimilarities are considered to be socially built. It raises the question of how men and women are composed and what implications this structure has for creating social order. Education and social interaction influence gender, which differs according to time and place. Gender does not “exist,” but it “performs.” A person is not at liberty to play the gender role as they wish. In every culture, some norms restrict proper gender behavior, which has social implications. The norms or ideas about gender that are taken for granted are examined and challenged in social constructivist feminist work. Hence, gender - rather than sex - goes beyond men and women. Professions and entrepreneurship, for example, are gendered (Ahl, 2006).

### 2.3.2 Migration Background and Culture

Migration is increasingly accepted as a major factor in the present economic, political, and sociological reality (Sinkovics & Reuber, 2021). According to the World Migration Report (McAuliffe & Oucho, 2024), in 2020, around 281 million people worldwide were international migrants, corresponding to around 3.6% of the total population. “Migrants are persons who have been outside their country of birth or citizenship for a period of 12 months or longer” (Sasse & Thielemann, 2005, p. 656). They leave their home countries because of compulsion, for economic or family reasons (Sasse & Thielemann, 2005). Motives for migration may be illegal or legal, e.g., for asylum application and work/family (Baycan-Levent & Nijkamp, 2009). In our study, we follow the general definition of a person’s migration background, which means he/she and/or the parent(s) were born without the citizenship of the country they live in (Destatis, 2025).

Despite the challenges of the refugee and migration crises in the host and transit countries (J.-J. Bock, 2018; Hangartner et al., 2019; International Organization for Migration, 2018; Sinkovics & Reuber, 2021), migrants promote entrepreneurship through innovation, improved productivity, and income (International Organization for Migration, 2018; Scheu & Kuckertz, 2023; Sinkovics & Reuber, 2021). Meanwhile, the proportion of entrepreneurs (in this case understood as self-employment) depends on the country. For instance, the rate of entrepreneurs was 16.6% in Australia, 14.3% in the UK, 8.3% in Germany, and 6.6 % in the United States in 2021 (Destatis, 2022). Thus, the effects on the progress of migrants and entrepreneurs are expected to be considerable (Naudé et al., 2017). German research data shows foreign entrepreneurial action occurs in approximately 20% of startups (Hirschfeld et al., 2024; Kollmann et al., 2022). In the United States, 43% of all Fortune 500 businesses were founded by individuals with a migration background (Center for American Entrepreneurship, 2017). This data shows that migrant businesses contribute to the host countries.

Migrants’ entrepreneurial actions have resulted in the emergence of the research stream, “migrant entrepreneurship,” also called “ethnic entrepreneurship” (Baycan-Levent & Nijkamp, 2009; Zhou, 2004). Sinkovics & Reuber, p. (2021, p. 1) define “migrant entrepreneurship as the entrepreneurial activity of foreign-born individuals in a country other than that of their birth.” A migrant entrepreneur is “a person who moves to another country for at least 12 months and establishes a business” (Sinkovics & Reuber, 2021, p. 5). An immigrant entrepreneur is “a person who has voluntarily fled his or her home country, who plans for permanent residency in the new country, and who engages in self-employment in a profit-seeking venture in the country of destination” (Christensen et al., 2020, p. 9). The difference between the migrant and immigrant entrepreneur relates to the stay in the host country (Sinkovics & Reuber, 2021). A refugee entrepreneur is a specific kind of migrant entrepreneur. He is defined as “a person who has involuntarily fled his or her home country, who plans for permanence in the new country of residence, and who engages in self-employment in a profit-seeking venture in the country of destination” (Christensen et al., 2020, p. 9). The main difference between an immigrant and a refugee entrepreneur lies in the (in)voluntary nature of their leaving (Christensen et al., 2020). Our study does not differentiate why, when, and where entrepreneurs and/or their ancestors left their home country. Thus, we do not distinguish between immigrant, refugee, and migrant entrepreneurs and related terms.

Migrant entrepreneurship has increased the growth of economies, specifically in the US and Europe (Baycan-Levent & Nijkamp, 2009; De Haas, 2010). Migrants are often more engaged in self-employment than nationals with comparable qualifications, as a general rule. In numerous nations, the rate of self-employed immigrants surpasses that of nationals. In recent years, migrants have experienced entrepreneurship in different aspects (e.g., cultural,

social, and financial attributes) and different political circumstances in the receiving nations (Baycan-Levent & Nijkamp, 2009). In Germany, migrants founded new businesses on average more frequently than non-migrants (6.7% vs. 5.9%), had a lower average income, a lower technology focus, and a higher proportion of exports (Sternberg et al., 2023). Migrant entrepreneurship has helped to cure social strains and challenges while improving employment perspectives for minority groups (Baycan-Levent & Nijkamp, 2009).

Furthermore, migrants provide a new viewpoint, a diverse culture, and different practices and preferences that open up new entrepreneurial opportunities. They may gain new insights in their host country and compare them with what they know from their home country. This leads to new visions and businesses (Ehrkamp, 2005; Ehrkamp & Leitner, 2003; Honig, 2020).

### 2.3.3 Risk

Research assumes that entrepreneurs are more willing to take risks than the population in general (Xu & Ruef, 2004) because a foundation is risky in itself. This is why entrepreneurship focuses on the topic of risk behavior (Das & Teng, 1998). The definition of risk is a significant fluctuation in results (Das & Teng, 1998). Risk propensity belongs to individual traits (Boustanifar et al., 2022; Highhouse et al., 2022). Many scholars have stated that risk-taking is situation-specific and depends on environmental factors (Larrick, 1993; Scholer et al., 2010; Zhang et al., 2019). From a motivational viewpoint, individuals are more likely to take risks when striving to achieve a target and risk-averse when trying to avoid failing (Schneider & Lopes, 1986; Zhang et al., 2019). Other studies show that risk-taking is area-dependent and that there are no consistencies across areas (Figner & Weber, 2011; Hanoch et al., 2006). For instance, a person is willing to take risks in the financial domain (e.g., speculative investments) and risk-averse in entertainment (e.g., skydiving). When behaviors are aggregated, there is considerable consistency across situations, even though the expression of a trait may vary in different situations, such as at home or work (Fleeson & Jayawickreme, 2015; Zhang et al., 2019). Higher risk leads to higher chances of failure (Van Gelderen et al., 2005). Individuals with a high-risk willingness tend to have a low-risk perception. They are, therefore, more tolerant of taking risks (Keil et al., 2000). To sum up, risk-seeking personalities may differ in their overall gradation of risk preference in a variety of situations, but they are generally more risk-seeking than risk-averse personalities (Zhang et al., 2019).

Several definitions of risk propensity exist. Brockhaus (1980, p. 513) defines propensity for risk-taking as “the perceived probability of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequences than the proposed situation.” Sitkin and Pablo (1992, p. 12) define risk propensity as “the tendency of a decision maker either to take or to avoid risks.” Zhang et al. (2019, p. 153) consider risk-taking propensity as “a person’s cross-situational tendency to engage in behaviors with a prospect of negative consequences such as loss, harm, or failure.” Like Boustanifar (2022), we use the term “risk propensity” to differentiate between the risk tendencies of individuals. The same is used by diverse research (Brockhaus, 1980; Schoemaker, 1993).

In addition to diverse strengths, different forms of risk exist. The strategic risk (e.g., the investments of other entrepreneurs) as well as the natural risk (e.g., luck) influence the payouts for entrepreneurs. The strategic risk is related to payoffs from the actions of other entrepreneurs. The fact as to whether the company is successful depends on the individual entrepreneurial decisions as well as the entrepreneurial strategies of others. In crowded markets with much competition, success is more difficult to achieve. Because entrepreneurial decisions alone do not determine the results, natural risk is also important. Luck is decisive, which means whims, fashions, and other twists of fate (Morgan et al., 2016). In research, another distinction is made between financial risks and non-financial risks. A financial risk factor could be a large amount of financing capital invested by a bank or a business angel (Van Gelderen et al., 2005). Relating to personal failings, non-finance-related risks involve the risk of losing local credibility or their personal relationship network (Hoogendoorn et al., 2019).

Further possible risks for an entrepreneur include the critical decision to grow in terms of internationalization. Potential buyers could discriminate against the startup product due to nationalistic emotions or ignorance of the brand and/or the governments of host countries by imposing restrictions on overseas enterprises. Foreign businesses may have difficulties interpreting signals from the local environment, implementing established routines, and reconciling institutional differences between the home and host countries. This risk is cross-sectoral (Boustanifar et al., 2022).

Against this theoretical background, our goal is to answer the overall research question: Is there a predisposition in the characteristics of founders that leads to certain startup types through the associated entrepreneurial ambitions?

Based on essential founders' characteristics, we derive hypotheses in the following chapter. Subsequently, we describe our applied method and present, interpret, and discuss our results. A post-hoc analysis delivers more interesting details about startup types.

### 3. Theoretical Framework and Hypotheses

In this section, we derive hypotheses and present our research model (see Figure 1).

Based on existing literature, we first develop a hypothesis regarding gender and startup types, which are characterized by three entrepreneurial ambitions: growth, exit, and cooperation ambitions (Kollmann & Pröpper, 2025). We assume that female founders are more orientated towards a *Zebra* with long-term linear growth, ownership, and cooperation ambitions. In contrast, male founders tend to be more a *Unicorn* with short-term exponential growth, exit, and competition ambitions.

Startup types differ in their growth ambitions (Kollmann & Pröpper, 2025). In general, enterprises managed by women are on average significantly smaller than those led by men (Jennings & Brush, 2013; B. Orser & Hogarth-Scott, 2002; Robb & Watson, 2012; Verheul & Thurik, 2001) and grow more slowly and sustainable than male-led enterprises (Alsos et al., 2006; Cliff, 1998; Jennings & Brush, 2013; B. Orser & Hogarth-Scott, 2002; B. J. Orser et al., 2006), which also applies to the different strengths of growth ambitions between the genders (Darnihamedani & Terjesen, 2020; B. Orser & Hogarth-Scott, 2002). Globally, in no region on earth do female entrepreneurs plan to grow on average more than male entrepreneurs (Darnihamedani & Terjesen, 2020; A. B. Elam et al., 2019). This is reflected in sales (B. Orser & Hogarth-Scott, 2002), total assets (Jennings & Brush, 2013), and the number of employees (Belitski & Desai, 2021; Jennings & Brush, 2013; B. Orser & Hogarth-Scott, 2002; B. J. Orser et al., 2006). Hence, females are relatively modest in their growth expectations and have conservative plans for growth and expansion (Cliff, 1998; Poggesi et al., 2015). They tend to be more inclined to set a maximum company size beyond which they do not want to expand. The limits are lower than those of male entrepreneurs. A company size is the threshold that the (female or male) entrepreneur could manage well. For example, this business size makes it possible to retain control of the company, spend an appropriate amount of time with the company, and/or reconcile work and private life. The decision not to grow can be made by reaching such a size threshold. Personal considerations are, therefore, weighted more heavily than economic considerations when deciding to expand a business (Cliff, 1998). Hence, it is recognized that limited business growth is a deliberate choice of women entrepreneurs (Cliff, 1998; B. Orser & Hogarth-Scott, 2002; Wang et al., 2019) and they are significantly less inclined to pursue high growth (Wang et al., 2019), while male entrepreneurs consider growth as the most essential goal of their enterprise (Verheul & Thurik, 2001). Gender-specific differences in the growth ambitions of entrepreneurs are due to factors at the individual level, which in turn may influence the results at the organizational level (Darnihamedani & Terjesen, 2020). To summarize, female and male entrepreneurs differ in their growth ambitions and, thereby, hypothetically diverge in being a different startup type.

Moreover, startup types vary in their exit/ownership ambitions. Thus, founders aim for either an exit or ownership for their startup's future (Kollmann & Pröpper, 2025; Wennberg et al., 2010). We assume the founders' gender influences this ambition. While 3.5% of women globally have exited their company over the past 12 months, the figure for men is slightly higher at 3.8%. Exit reasons for women include social conditions, restricted access to essential resources, tax policy, and a planned exit (A. Elam et al., 2023). We conclude that men strive more for an exit for their startups than women.

Furthermore, startup types differ in the ambition of cooperation or competition (Kollmann & Pröpper, 2025). Our assumption is that the founders' gender impacts the direction/strength of this ambition. Men perform better when there is competition. Contrary to women, they show a stronger reaction to intergroup competition and collaborate more strongly with their group under conditions of intergroup threat. In social dilemmas, they make more competitive decisions between groups, so they are perceived as so-called "male warriors." In contrast, intergroup competition affects women's reaction relatively little (Van Vugt et al., 2007). Male intergroup competition is typically observed in society, for instance, in competitive sports, civil convictions, gang behavior, and wars (Keeble, 2011; Palmer & Tilley, 1995; Van Vugt et al., 2007). These gender differences may have evolutionary roots (Van Vugt et al., 2007). All in all, females and males follow different goals and strategies (Chaganti & Parasuraman, 1997). Therefore, we hypothesize the following relationship between the founders' gender and startup types:

*Hypothesis 1:* The founders' gender is related to startup types (differentiated in entrepreneurial ambitions). Female founders are more orientated towards *Zebra* ambitions. On the contrary, male founders tend to follow more *Unicorn* ambitions.

Secondly, we develop a hypothesis regarding culture/migration background and startup types (differentiated in their entrepreneurial ambitions). Entrepreneurship is increasingly changing due to factors like migration and culture (Honig, 2020), which are diverse and heterogeneous (Honig, 2020; Serrie, 1998). History shows that immigrants have included their culture in their host countries over generations and brought, for example, goods like kebab shops and other cultural properties (Ehrkamp, 2005; Honig, 2020). In cities, they have built ethnic areas with colloquial titles (e.g., “Chinatown”, “Little Italy”, “Japan-town”) (Honig, 2020). Through their diverse affectations in cooking, clothing, and other cultural practices and values, migrants offer a new view on life in the past and present, which might benefit their environment and afford entrepreneurial opportunities (Ehrkamp, 2005; Honig, 2020). This way, individuals with different cultural backgrounds differ in their entrepreneurial mindset and ambitions in business and entrepreneurship (Serrie, 1998), which we assume to be expressed in various startup types (Kollmann & Pröpper, 2025). Therefore, we hypothesize that different cultural backgrounds of founders lead to different startup types:

*Hypothesis 2:* The migration/cultural background of founders is positively related to startup types (differentiated in entrepreneurial ambitions). Non-migrant founders tend to follow more *Zebra* ambitions, while migrant founders are more oriented towards *Unicorn* ambitions.

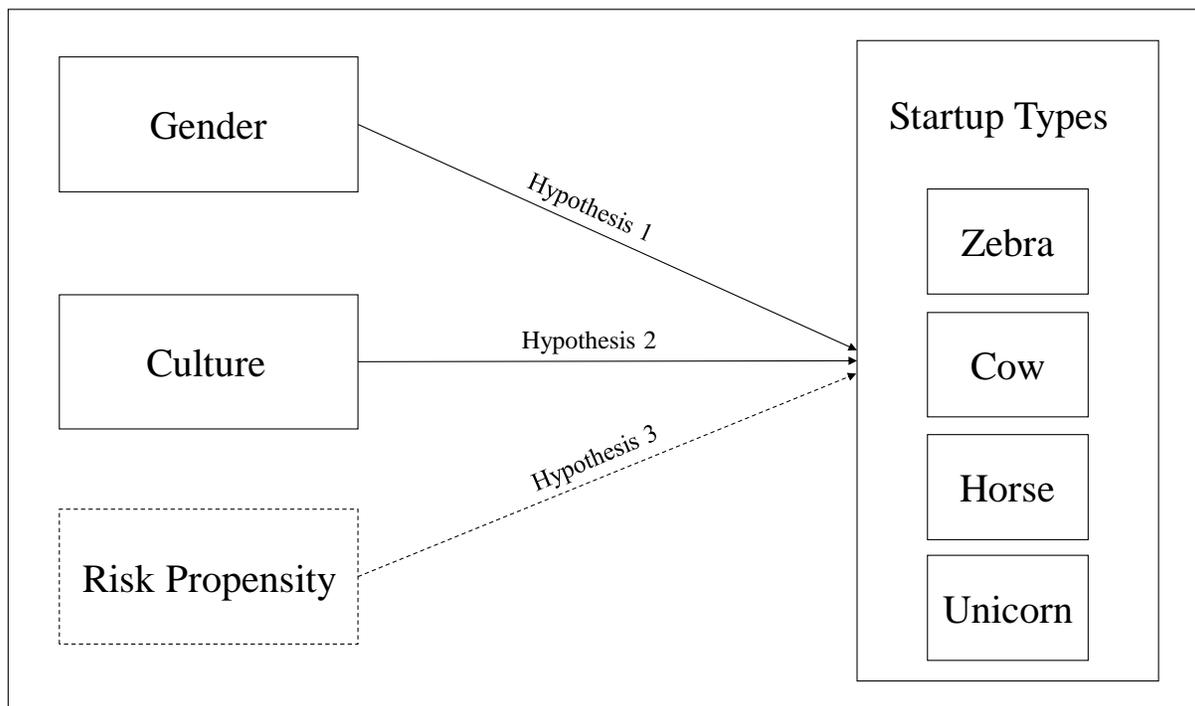


Figure 1. Research Model: Influence of Gender, Culture (Main Analysis), and Risk Propensity (Post-hoc Analysis) on Startup Types (differentiated in Entrepreneurial Ambitions)

Third, we develop a hypothesis regarding the founders’ risk propensity and startup types for our post-hoc analysis. Like entrepreneurial ambitions, risk propensity belongs to personal factors (Highhouse et al., 2022; Keil et al., 2000) and is a personality trait and not just a situational attitude. There are individual differences in the willingness to take risks. Significant differences between individuals have been observed in financial, leisure, ethical, and social risk behavior in particular (Highhouse et al., 2022; Weber et al., 2002). In contrast to the general population, entrepreneurs are considered to be more willing to take risks (Macko & Tyszka, 2009). Hence, more risk-tolerant individuals tend to become founders (Hvide & Panos, 2014) because the establishment of new companies is, by definition, a risky endeavor (Das & Teng, 1998; Vereshchagina & Hopenhayn, 2009). The willingness to take risks seems to be one of the most characteristic features of entrepreneurial behavior (Das & Teng, 1998). High failure rates for such innovations are the rule rather than the exception. Entrepreneurial activities are associated with major financial and personal investments. Hence, if the entrepreneur fails, he usually suffers enormous losses. However, an entrepreneurial attempt also brings a great deal of prosperity and personal fulfillment, which is greater than normal

(Das & Teng, 1998). Given that growing the company is perceived to be risky, more risk-averse entrepreneurs are less ambitious to grow the company to its maximum possible potential (Verheul & Van Mil, 2011). Thus, more risk-affine entrepreneurs follow the ambition to grow their company (Cassar, 2007; Verheul & Van Mil, 2011). Once a company has been founded, there may be differences in risk propensity between the founders, which are reflected in their startup type and ambitions. Therefore, we hypothesize:

*Hypothesis 3:* The founders' risk propensity positively relates to a specific startup type (differentiated in entrepreneurial ambitions). A lower risk propensity leads to pursuing more *Zebra* ambitions, while a higher risk propensity results in following more *Unicorn* ambitions.

#### 4. Method

##### 4.1 Sample and Data Collection

The participants of this study were founders of startups in Germany. To test our hypotheses, we conducted a repeated cross-sectional study based on data from startups in the German Startup Monitor (original: Deutscher Startup Monitor). As the largest annual large-scale survey on German startups, the German Startup Monitor is directed by the German Startup Association. This nationwide association promotes the entire German startup ecosystem and the interests of startups toward legislation, administration, and the public. The German Startup Monitor seeks to capture the current state of the German startup ecosystem (Kollmann et al., 2020, 2022; Kollmann, Kleine-Stegemann, Then-Bergh, & Harr, 2021).

We analyzed startups younger than ten years old, oriented towards growth regarding their sales and/or employees, and/or innovative in terms of their products/services, business models, and/or technologies (Kollmann et al., 2020, 2022; Kollmann, Kleine-Stegemann, Then-Bergh, Harr, et al., 2021). The online-based survey was distributed through a professional partner of the German Startup Association and conducted for three consecutive years between May and June 2020, 2021, and 2022. Concretely, we used datasets of Kollmann & Pröpper (2025) with a final sample of 761 startups in 2020, 671 startups in 2021, and 553 startups in 2022. Table 1 offers an overview of the dataset's descriptive statistics.

Table 1. Descriptive Statistics of the Datasets from 2020 to 2022 (Kollmann & Pröpper, 2025)

		2020	2021	2022
final sample		761	671	553
startup age in years	<i>mean</i>	2.4	2.6	2.8
	<i>SD</i>	2.04	2.04	2.3
	<i>min</i>	0	0	0
	<i>max</i>	9.92	9.33	9.83
number of founders	<i>sum</i>	1,910	1,750	1,372
	<i>mean</i>	2.51	2.61	2.48
	<i>SD</i>	1.12	1.17	1.15
	<i>min</i>	1	1	1
	<i>max</i>	7	10	10
number of current employees	<i>sum</i>	9,526	8,639	12,436
	<i>mean</i>	13.25	13.31	23.24
	<i>SD</i>	36.27	34.4	102.4
	<i>min</i>	0	0	0
	<i>max</i>	480	450	1,450

The 2020 sample is allocated to the top five industries: 33.5% in information and communication technology, 8.5% in medicine and healthcare, 6.2% in nutrition and food, 4.9% in building and real estate, and 4.9% in consumer goods.

In 2021, the sample is distributed over the top five industries: 33.5% in information and communication technology, 9.9% in medicine and healthcare, 4.5% in nutrition and food, 4.3% in automobiles and mobility, and 4.0% in consumer goods.

The sample in 2022 is spread over the top five industries: 30.4% in information and communication technology, 8.5% in medicine and healthcare, 5.1% in energy and electricity, 4.5% in industrial goods, and 4.2% in consumer goods (Kollmann & Pröpper, 2025).

#### 4.2 Measures

Single and multi-item scales provide both advantages and disadvantages. A single-item measure may not perform as well in one situation, although it may do as well as the multi-item measures in another context (Diamantopoulos et al., 2012). In contrast to single-item scales, multi-item measures generally offer more information and are more reliable, so they are frequently preferred in research (Bergkvist & Rossiter, 2007). The use of single-item scales is practically justified (Bergkvist & Rossiter, 2007) and enables overcoming conceptual, methodological, and empirical challenges (Matthews et al., 2022) by reducing respondent burden, survey length, and item repetition (Drolet & Morrison, 2001; Matthews et al., 2022; Rogelberg & Stanton, 2007). In cooperation with the German Startup Association, the surveys were practice-oriented questionnaires in which scientific scales could only be used to a limited extent. Due to the questionnaire's structure and scope, we used single-item scales. Since we tested our single-item scales in surveys over three years with 1,985 responses, we consider them robust enough to assume reliability and validity.

#### 4.3 Dependent Variable

To measure our dependent variable "startup types," we followed the approach based on entrepreneurial ambitions by Kollmann & Pröpper (2025). Asking the founders how much certain statements apply to their startup, the surveys offer a semantic differential with two poles (Heise, 1969; Kaplan, 1972). The following questions measured entrepreneurial ambitions: "1) long-term linear increase in value vs. short-term exponential increase in value ("We strive for a long-term linear increase in value" vs. "We strive for a short-term exponential increase in value"), 2) ownership vs. exit ("We plan to fully own/maintain the company shares" vs. "We plan a complete exit/sale/IPO of the company shares"), and 3) cooperation vs. competition ("We see other market participants as potential partners" vs. "We see other market participants as potential competitors")" (Kollmann & Pröpper, 2025, pp. 43–44). Each pole has the value of "strongly agree" (values -3 and 3) to "agree" (values -2 and 2) to "rather agree" (values -1 and 1). The surveys offer an additional neutral response option (value 0) to not force the subjects in any direction (Heise, 1969; Kaplan, 1972). Kollmann & Pröpper (2025) have clustered these entrepreneurial ambitions into four ambition/startup types (see section 4.2.1), which serve as the dependent variable in our study (0 = Zebra, 1 = Cow, 2 = Horse, 3 = Unicorn).

#### 4.4 Independent Variables

To determine the founders' gender, the variable "gender" is defined as an independent variable and as a dummy variable to measure the founder's sex (Acker, 1992; Poggesi et al., 2015). The probands state their gender as 1=male; 2=female; 3=diverse.

The founders' migration background and culture are measured by the question "What citizenship do you and your parents have by birth (this includes stepmothers, adoptive and foster mothers)?" The founders are presented the answer options "German citizenship" and "foreign citizenship" (dropdown with countries) for themselves, their mother, and their father. If at least one of these three persons above was not born with German citizenship, they count as a person with a migration background (Destatis, 2025).

To assess the founders' risk propensity for the post-hoc analysis, we followed the approach by Keil et al. (2000). On a 5-point scale (1 = "much less willing"; 5 = "much more willing"), the participants indicated how they would rate their willingness to undertake risky business propositions compared to other startup founders.

#### 4.5 Method of Analysis

To test our hypotheses, we performed regression analyses. This statistical method belongs to the quantitative analysis methods, is widely applied in data analysis, and can determine the correlation between variables (Mooi et al., 2018; Sykes, 1993). Specifically, we conducted a multiple regression analysis to test our research model. In our post-hoc

analysis, we carried out a simple regression analysis with one independent variable (Rawlings et al., 1998; Sykes, 1993; Uyanık & Güler, 2013).

Reliability and validity are assessed to verify our hypotheses. By testing the stability of our measuring instruments, we checked reliability. Therefore, we practiced split-half reliability by testing the hypotheses with 50 percent of the sample (Hair et al., 2019; Steinke & Kopp, 2020). Validity means that a measurement method measures what it is supposed to measure. We evaluated validity by an ANOVA (Hair et al., 2019). IBM SPSS Statistics 29 software was used for our analysis.

## 5. Results

We predicted a significant effect of the founders' characteristics on startup types, which are based on entrepreneurial ambitions with different strengths and content. To test our hypotheses, we conducted regression analyses with datasets of three consecutive years ( $n = 1,985$  startups). We verified our results for quality criteria to check whether they are robust. Afterward, we interpret our results. Subsequently, we conduct a post-hoc analysis to test our third hypothesis and gain further insights.

### 5.1 Tests of Hypotheses (Personality-Related Items)

For the dataset in 2020, the multiple regression analysis with startup types (differentiated in entrepreneurial ambitions) as the dependent variable and founders' gender and migration background as explanatory variables is significant,  $F(2.742) = 9.716$ ,  $p < .001$ . The independent variables explain 2.3% of the variance in startup types. The model shows that gender significantly negatively affects startup types ( $\beta = -0.422$ ,  $p < .001$ ), which indicates support for Hypothesis 1. In line with Hypothesis 2, the model shows a significant positive effect of migration background on startup types ( $\beta = 0.249$ ,  $p < .02$ ). The results are shown in Table 2.

Table 2. Regression Analysis Predicting Startup Types in 2020

Variables	Unstandardized	Standardized	Standard error
Constant	2.116***		0.137
Gender	-0.422***	-0.137***	0.112
Migration Background	0.249*	0.088*	0.103
R <sup>2</sup>	0.026		
adjusted R <sup>2</sup>	0.023		
F (df=2.742)	9.716***		

Note. \* $p < 0.02$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

To confirm the results of the 2020 analysis, we conducted two further analyses using data from 2021 and 2022.

For the dataset in 2021, the regression analysis with startup types as the dependent variable and founders' gender and migration background as explanatory variables is significant,  $F(2.659) = 10.152$ ,  $p < .001$ . 2.7% of the variance in startup types can be explained by the independent variables. In line with Hypothesis 1, the model shows that the gender significantly negatively affects startup types ( $\beta = -0.465$ ,  $p < .001$ ). The model shows a significant positive effect on startup types of migration background ( $\beta = 0.314$ ,  $p < .01$ ), which supports Hypothesis 2. The results are shown in Table 3.

For the dataset in 2022, the multiple regression analysis with startup types as the dependent variable and founders' gender and migration background as the explanatory variable is also significant,  $F(2.547) = 12.77$ ,  $p < .001$ . 4.1% of the variance in startup types can be explained by the independent variables. In line with Hypothesis 1, the model shows that gender significantly negatively affects the startup types ( $\beta = -0.577$ ,  $p < .001$ ). There is also a significant positive effect of migration background on startup types ( $\beta = 0.248$ ,  $p < .06$ ), which indicates support for Hypothesis 2. Table 4 presents the results.

Table 3. Regression Analysis Predicting Startup Types in 2021

Variables	Unstandardized	Standardized	Standard error
Constant	1.658***		0.149
Gender	-0.465***	-0.149***	0.12
Migration Background	0.314**	0.103**	0.117
R <sup>2</sup>	0.03		
adjusted R <sup>2</sup>	0.027		
F (df=2.659)	10.152***		

Note. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

Table 4. Regression Analysis Predicting Startup Types in 2022

Variables	Unstandardized	Standardized	Standard error
Constant	1.843***		0.163
Gender	-0.577***	-0.193***	0.125
Migration Background	0.248*	0.081*	0.128
R <sup>2</sup>	0.045		
adjusted R <sup>2</sup>	0.041		
F (df=2.547)	12.77***		

Note. \*p < 0.06; \*\*p < 0.01; \*\*\*p < 0.001

### 5.2 Reliability and Validity

To ensure the accuracy of our results, we assessed both reliability and validity. Reliability is verified with a randomly determined sample size of 50 percent (Hair et al., 2019; Steinke & Kopp, 2020). Kollmann & Pröpper (2025) assessed the reliability and validity of the cluster analysis. Therefore, we conducted the regression analyses with half of the dataset, the so-called split-half reliability. The results of the original and the half dataset were compared (Hair et al., 2019).

For the reliability in 2020, the regression analysis with the half of the dataset is significant,  $F(2.368) = 7.233$ ,  $R^2 = 0.038$ ,  $adjusted\ R^2 = 0.033$ ,  $p < .001$ .

For the reliability in 2021, the regression analysis demonstrations also significant results,  $F(2.328) = 8.637$ ,  $R^2 = 0.05$ ,  $adjusted\ R^2 = 0.044$ ,  $p < .001$ .

For the reliability in 2022, the regression analysis with the half of the dataset is also significant,  $F(2.272) = 8.914$ ,  $R^2 = 0.062$ ,  $adjusted\ R^2 = 0.055$ ,  $p < .001$ .

Second, validity is evaluated by an ANOVA (see Table 5). The findings show statistically significant differences between the startup types (Hair et al., 2019). All in all, our results are stable.

### 5.3 Interpretation

In the following sections, we provide an in-depth interpretation of our results.

#### 5.3.1 Gender

In 2020, female founders increasingly pursue *Zebra* ambitions (31.7%), while the proportion of male founders pursuing *Zebra* ambitions is lower (19.5%). This proportion of founders plans to grow for the long term, strive for ownership, and cooperate with competing companies. They focus more on sustainable and long-term business models. These female and male founders may have a broader perspective on the impact of companies on the community and the environment. *Zebbras* are characterized by their ability to solve real problems and bring about lasting change, but more women than men pursue these ambitions for their business. However, women have difficulties obtaining the same funding opportunities as men (Amatucci & Sohl, 2004; Edelman et al., 2018; Muravyev et al., 2009; Rinding & Swift, 1990). On the other side, some women do not seek external funding. For instance, they believe they already have sufficient funds and/or want to retain control over their company (Watson et

al., 2009) and thus strive for ownership. A possible reason is that they pursue more realistic and pragmatic goals to be successful. In addition, they may tend to become more involved in communities and build support networks. This aligns with *Zebra* ambitions to pursue cooperative approaches and social responsibility.

Table 5. ANOVA

Measure	Year	Sum of the squares	<i>df</i>	Mean of the squares	<i>F</i>	Sig.
Gender	2020	18.323	1	18.323	14.424	.000
	2021	23.634	2	11.817	8.203	.000
	2022	35.099	2	17.549	11.996	.000
Migration Background	2020	6.799	1	6.799	5.277	.022
	2021	7.669	1	7.669	5.229	.023
	2022	6.183	1	6.183	4.082	.044

Women pursue *Cow* and *Horse* ambitions in equal proportions (24.4%). The situation is similar for men: They also follow *Cow* ambitions (21.7 %) and *Horse* ambitions (24.4 %). This means they want to grow faster and are less willing to cooperate than the *Zebras*. With *Cow* ambitions, they strive for ownership while the *Horses* pursue an exit.

At 34.5%, male founders aim for high growth targets and an exit. They try to kick the competition out of the market and build a monopoly. With these goals, they pursue *Unicorn* ambitions. Traditional societal expectations and stereotypes mean that male founders feel more pressure to achieve great and spectacular success, which must be pursued through high ambitions. Due to their personality traits or social expectations, they may be prepared to make larger investments in order to grow their startup quickly. In addition, male founders have easier access to certain financing options (Amatucci & Sohl, 2004; Edelman et al., 2018; Muravyev et al., 2009; Rinding & Swift, 1990), which helps achieve exponential growth. Additionally, they may be increasingly active in sectors and networks where high growth targets and high valuations are considered the norm. These environments influence expectations and ambitions. Females can also be very ambitious and pursue *Unicorn* ambitions, albeit to a lesser extent (19.5%).

From a liberal feminist perspective (see section 2.3.1), men and women are equally competent, but female entrepreneurs have different opportunities than males, partly due to discrimination. For example, because they are denied resources such as funding (Amatucci & Sohl, 2004; Edelman et al., 2018; Muravyev et al., 2009; Rinding & Swift, 1990). As a result, they have lower ambitions and fewer women pursue the goal of founding large companies or growing their companies exponentially, aiming for an exit and having a competitive view of the market like *Unicorns*.

According to the social feminist theory (see section 2.3.1), women and men are inherently different and thus have different ambitions. Women tend to have entrepreneurial ambitions more in the direction of *Zebra* and *Cow*, while men seek more *Unicorn* ambitions.

From a social constructionist feminist perspective (see section 2.3.1), women's increased *Zebra* and men's increased *Unicorn* ambitions can be explained by history: In the past, men were encouraged to pursue career goals and strive for professional success as family providers, while women were more often involved in roles as caregivers and family nurturers (Cinamon & Rich, 2002; Moya et al., 2000). These social norms and expectations could mean that

men and women in the present time have different priorities and ambitions. Women are also able to plan more sustainably and are less competitive than men. However, these differences are tendencies and do not apply to all female founders, as they can also pursue stronger ambitions with *Horses* and *Unicorns*. Table 6 shows the percentage distribution of male and female founders in 2020.

Table 6. Percentage Distribution of Male and Female Founders in 2020

2020	male	female
Zebra	19.5%	31.7%
Cow	21.7%	24.4%
Horse	24.4%	24.4%
Unicorn	34.5%	19.5%

The percentage distribution changed over the years due to the COVID-19 pandemic. In Germany, the first cases of COVID-19 were reported at the beginning of 2020, from which the COVID-19 pandemic developed (Schilling et al., 2021). The pandemic also substantially impacted the economy (BMF, 2021; Eger et al., 2021; Truong & Truong, 2022). Because we conducted our surveys between May and June, it has not yet affected our ambitions in our 2020 dataset. Conversely, the 2021 and 2022 datasets are influenced by the COVID-19 pandemic. This has led to declining *Unicorn* ambitions for female and male founders, favoring *Zebras*. *Zebra* ambitions have more than doubled in the process. Around a third of women still had *Zebra* ambitions at the beginning of the pandemic. After two years of the pandemic, the figure is over two-thirds. There has also been an increase in *Zebra* ambitions among men. The number of *Zebra* ambitions has doubled to 41.1%.

During the COVID-19 pandemic, many founders have realized that the uncertainties and challenges in the economy make it more difficult if they have strong ambitions toward *Horses* and *Unicorns*. The instability of the markets and uncertainty about the future led founders to focus more on realistic and sustainable business models (*Zebra* ambitions) instead of striving for strong growth, exit, and competition (*Unicorn* ambitions). In times of economic uncertainty, these values may be more attractive to founders as they provide a stable basis for long-term success. As a result, founders may have increasingly pursued *Zebra* ambitions during the pandemic to focus on resilient and sustainable business models. Tables 7 and 8 display the percentage share of female and male founders over the years.

Table 7. Percentage Distribution of Male Founders over the Years

Male founders	2020	2021	2022
Zebra	19.5%	43.2%	41.1%
Cow	21.7%	10.2%	9.5%
Horse	24.4%	25.1%	25.4%
Unicorn	34.5%	21.5%	24.0%

Table 8. Percentage Distribution of Female Founders over the Years

Female founders	2020	2021	2022
Zebra	31.7%	62.0%	67.2%
Cow	24.4%	13.2%	5.0%
Horse	24.4%	10.7%	16.0%
Unicorn	19.5%	14.0%	11.8%

To summarize, we confirm Hypothesis 1 regarding gender and startup types, meaning that female founders tend to have more *Zebra* ambitions, while male founders, on average, pursue more *Unicorn* ambitions.

### 5.3.2 Migration Background and Culture

In 2020, non-migrant founders pursued more *Zebra* ambitions (23.1%) than migrant founders (15%). Conversely, foreign founders pursue more *Unicorn* ambitions (39.9%) than non-migrant founders (30.3%). *Cows* and *Horses* show a mixed percentage distribution of both founder groups. Table 9 presents the distribution of founders differentiated by migration background in 2020.

Table 9. Percentage Distribution of Founders differentiated by Migration Background in 2020

2020	Non-migrant founders	Migrant founders
Zebra	23.1%	15.0%
Cow	21.4%	23.5%
Horse	25.1%	21.6%
Unicorn	30.3%	39.9%

We interpret our results from a cultural, economic, and psychological perspective. Experience with economic uncertainties may be an explanatory factor. Many migrant founders come from families that have experienced economic insecurity. This could motivate them to strive for particularly great economic success to achieve a high level of financial security. A *Unicorn* exit may appear to be the ultimate goal. Non-migrant founders may have experienced a more stable socio-economic and predictable environment in Germany, where financial security and long-term sustainability are prioritized over rapid expansion, making them more likely to believe in sustainable but less risky business models. As a result, these founders may be more inclined to adopt the aim of *Zebra* ambitions—building sustainable businesses that balance profitability with social impact rather than aiming for high-stakes, winner-takes-it-all *Unicorns*.

Networks and access to capital are also explanatory components. *Unicorns* often require large financing rounds (Brown & Wiles, 2020). Many migrants do not have direct access to traditional financial networks in their host country but are forced to approach alternative, often more international investors. This can steer their ambitions towards scalable, global business models. Non-migrant founders may have better access to conservative, middle-class investors who favor *Zebbras*, focusing on long-term consistency and social responsibility.

The two groups can also differ regarding role models and success models. Many successful migrant entrepreneurs take international role models from the United States or other startup hotspots as their role models, where *Unicorns* are seen as the holy grail of entrepreneurship (Aldrich & Ruef, 2018). Conversely, Germany has a strong SME culture with successful, sustainably growing companies (so-called hidden champions) (Johann et al., 2022). These ambitions characterize many local founders who value long-term stability more than short-term scaling.

In 2021 and 2022, the distribution of startup types based on the founders' origin has changed. One notable trend is that local founders pursue *Zebra* ambitions more often than migrant founders. While 48.5% of non-migrant founders strive for sustainable, stable business models with linear growth, ownership, and cooperation in 2021, this proportion is only 37.1% for migrant founders. At the same time, a decline in highly ambitious *Unicorns* can be observed. This is reflected by non-migrant founders (19.2%) and migrant founders (25%) who are *Unicorns* in 2021. In relation to 2020, fewer founders aim to grow extremely quickly in 2021 and 2022. One possible reason for this shift may be the COVID-19 pandemic. The economic uncertainties and challenges during the pandemic may have led to more founders focusing on sustainable business models instead of taking high risks for exponential growth. This development could impact the startup landscape in the long term, leading to a greater emphasis on sustainable *Zebbras* and more responsible entrepreneurship. Tables 10 and 11 present the distributions and differences between non-migrant and migrant founders in 2021 and 2022.

Another explanatory aspect is risk propensity. We assume that migrant founders are more willing to take risks, as they and/or their families have already overcome major challenges such as migration and integration. Therefore, they may be more willing to put all their eggs in one basket and aim for a highly scalable *Unicorn*. In contrast, local founders tend to favor the sustainable startup *Zebra*, which offers long-term stability. This could be related to a reduced need to take existential risks. We conducted a post-hoc analysis in section 5.4 to prove this hypothesis of risk propensity.

Table 10. Percentage Distribution of Founders differentiated by Migration Background in 2021

2021	Non-migrant founders	Migrant founders
Zebra	48.5%	37.1%
Cow	10.6%	12.1%
Horse	21.7%	25.8%
Unicorn	19.2%	25.0%

Table 11. Percentage Distribution of Founders differentiated by Migration Background in 2022

2022	Non-migrant founders	Migrant founders
Zebra	49.2%	36.9%
Cow	7.3%	13.5%
Horse	23.7%	21.6%
Unicorn	19.8%	27.9%

The differences in startup types because of migration are attributable to different socio-economic experiences, access to capital, cultural influences, and risk propensity. While migrant founders often strive for the rapid, disruptive success of a winner-takes-it-all *Unicorn*, non-migrant founders tend to focus on long-term, stable business in the sense of a *Zebra*. Both approaches are justified. They reflect different ambitions, experiences, networks, and cultures. Therefore, we do not decide which approach is better.

To conclude, we confirm Hypothesis 2, i.e., non-migrant founders strive for more *Zebra* ambitions, while migrant founders tend to have more *Unicorn* ambitions.

#### 5.4 Post-hoc Analysis (Behavior-Related Item)

We analyze whether risk propensity could further explain differences in startup types. It could illuminate how migrant founders tend to follow more *Unicorn* ambitions than local founders without a migration background.

##### 5.4.1 Results

For the dataset in 2020, the simple regression analysis with risk propensity as an explanatory variable and startup types as the dependent variable is significant,  $F(1.749) = 68.866$ ,  $p < .001$ . The variable risk propensity explains 8.4% of the variance in startup types. The model shows a significant positive effect of risk propensity on startup types ( $\beta = 0.34$ ,  $p < .001$ ), which supports Hypothesis 3. The results are shown in Table 12.

Table 12. Regression Analysis Predicting Startup Types in 2020

Variables	Unstandardized	Standardized	Standard error
Constant	0.526***		0.144
Risk Propensity	0.34***	0.29***	0.041
R <sup>2</sup>	0.084		
adjusted R <sup>2</sup>	0.083		
F (df=1.749)	68.866***		

Note. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

For the dataset in 2021, the regression analysis with risk propensity as the explanatory variable and startup types as the dependent variable is also significant,  $F(1.661) = 63.545$ ,  $p < .001$ . 8.8% of the variance in startup types is explained by the variable risk propensity. The model shows a significant positive effect of risk propensity on startup types ( $\beta = 0.371$ ,  $p < .001$ ). Thus, we support Hypothesis 3. Table 13 shows the results.

Table 13. Regression Analysis Predicting Startup Types in 2021

Variables	Unstandardized	Standardized	Standard error
Constant	-0.074		0.162
Risk Propensity	0.371***	0.296***	0.047
R <sup>2</sup>	0.088		
adjusted R <sup>2</sup>	0.086		
F (df=1.661)	63.545***		

Note. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 5.4.2 Reliability and Validity

We assessed the quality criteria reliability and validity, proving the model's robustness for the post-hoc analysis. For the reliability in 2020, the regression analysis with the half of the data set is significant,  $F(1.376) = 45.752$ ,  $R^2 = 0.108$ , *adjusted R<sup>2</sup>* = 0.106,  $p < .001$ . The model shows that the risk propensity significantly positively affects startup types ( $\beta = 0.386$ ,  $p < .001$ ).

For the reliability in 2021, the regression analysis with half of the dataset is significant,  $F(1.331) = 38.789$ ,  $R^2 = 0.105$ , *adjusted R<sup>2</sup>* = 0.102,  $p < .001$ . The model shows a significant positive effect of founders' risk propensity on startup types ( $\beta = 0.4$ ,  $p < .001$ ). Table 14 presents the validity by an ANOVA.

Table 14. ANOVA

Measure	Year	Sum of the squares	df	Mean of the squares	F	Sig.
Risk Propensity	2020	86.35	4	21.587	18.307	.000
	2021	90.189	4	22.547	16.69	.000

#### 5.5 Interpretation

The post-hoc analysis shows a significant effect of risk propensity on startup types. Depending on how risk-averse a founder is, his startup will pursue different ambitions in being a startup type. Founding a startup with *Zebra* ambitions is associated with the lowest risk, while *Unicorns* are associated with the highest risk in the Startup-Zoo. This is also reflected in the founders' risk propensity (see Table 15). *Cows* and *Horses* show average values.

*Zebras* strive for sustainable and linear long-term growth in contrast to *Unicorns*, which aim for rapid growth. A sustainable growth approach may make companies more resilient to economic fluctuations. *Zebras* emphasize realistic business goals, which helps to create realistic expectations and reduce the risk of excessive pressure. They tend to emphasize financial independence and sustainable financing, which can reduce the risk of external influences. *Zebras* often emphasize diversification and resilience in their business models. This makes them less susceptible to external shocks and reduces the risk of collapse.

Founders with an affinity for risk are attracted by the high potential returns promised by *Unicorns*. To enable rapid growth, *Unicorns* are usually heavily dependent on external investors, which puts additional pressure on the company to reach certain milestones. Risk-takers may be attracted by the opportunity to create innovative products or services that revolutionize a market. They seek challenging business activities to test their skills and entrepreneurial spirit. Taking risks and overcoming challenges can lead to a deeper understanding of their own abilities.

Different risk propensity may be one explanatory factor for the fact that migrant founders tend to follow more *Unicorn* ambitions, contrary to founders without a migration background (see section 5.3.2). The willingness to take risks is often shaped by personal emotions and feelings (Loewenstein et al., 2001), experiences, socioeconomic backgrounds, and cultural influences. Migrant founders or their families have already navigated significant

uncertainties—whether by relocating to a new country, adapting to a different culture, or overcoming systemic barriers. These experiences may cultivate a higher tolerance for uncertainty and a stronger drive to pursue ambitious, high-risk ventures with the target of exponential growth.

Table 15. Mean Value of Risk Perception of the Startup Types in 2020 and 2021

	2020	2021
Zebra	2.86	3.09
Cow	3.35	3.24
Horse	3.55	3.5
Unicorn	3.65	3.82

Thus, the differences in risk propensity between these two groups provide valuable insights into their diverging ambitions/startup types. While migrant founders may see *Unicorn* ambitions as a means of breaking barriers and achieving transformative success, their native-born counterparts may prioritize business models that align with Germany's tradition of stability, long-term growth, and resilience.

A further factor for the development of risk propensity over the years could be the COVID-19 pandemic. Founders with *Zebra* and *Unicorn* ambitions have become more risk-averse. The risk appetite of *Cows* and *Horses* has decreased slightly over time due to the COVID-19 pandemic.

As the willingness to take risks has increased among founders with *Zebra* and *Unicorn* ambitions, it can be interpreted that they also recognized opportunities in the crisis. The pandemic led to a major change in consumer needs and behavior (Akram et al., 2021; Eger et al., 2021; Truong & Truong, 2022), which created new business opportunities. Founders recognizing these opportunities decided to take risky steps to position themselves in new markets.

The pandemic accelerated the use of technology in various industries. Founders who offered innovative technologies experienced increased demand for their solutions and were, therefore, willing to take risks to capitalize on these opportunities. The need for remote working and digital solutions has led to changes in how many companies work (Barry et al., 2022; Shirmohammadi et al., 2022; Tagliaro & Migliore, 2022). Founders of companies in the field of remote working technologies or digital communication may have seen the crisis as an opportunity to establish their products and services. Some founders had to rely on flexible and adaptable business models that allowed them to react quickly to the changing situation. This flexibility is interpreted here as a willingness to take risks in order to adapt to new realities. In summary, we confirm Hypothesis 3. Founders with *Zebra* ambitions have the lowest risk propensity, while founders with *Unicorn* ambitions have the highest in the Startup-Zoo Framework.

## 6. Discussion

All startup types matter for the economy and society (Morris & Kuratko, 2020). We explore the diversity of entrepreneurship by including different startup types, not only the most prominent ones (Aldrich & Ruef, 2018; Kuratko & Audretsch, 2022). For a comprehensive picture of the entrepreneurial ecosystem, we focus on the extremes of *Zebra* and *Unicorn* and also integrate the hybrid forms of *Cow* and *Horse* into our analysis (Kollmann & Pröpper, 2025). We examined a repeated cross-sectional study of founders with three consecutive surveys (n = 1,985 startups) and performed regression analyses over three successive years. As a result, we found a significant influence of (1) gender and (2) culture on startup types. In a post-hoc analysis, we analyzed the influence of the variable (3) risk propensity on (4) startup types to explain the primary analysis results.

### 6.1 Theoretical Implications

In theory, we contribute to the field of entrepreneurship in several ways. First, our research contributes to the literature on gender issues in entrepreneurship (Ahl, 2006; Hughes et al., 2012; Poggesi et al., 2015; Verheul et al., 2006; Welter et al., 2017) by providing valuable insights into the determinants of female and male entrepreneurial activity. By doing this, we investigate entrepreneurship's diversity, including female and male entrepreneurs (Welter et al., 2017). Thereby, we contribute to the understanding of the entrepreneurial landscape (Verheul et al., 2006). We also interpret our results from different feminist theory perspectives: Liberal feminism, social feminist theory, social constructionist and poststructuralist feminist theory.

Second, we contribute to the literature on migration entrepreneurship (Honig, 2020; Kontos, 2003; Naudé et al., 2017) by analyzing their effect on startup types, which are differentiated in entrepreneurial ambitions. In particular, we examine how migrants' entrepreneurial activities contribute to the entrepreneurial landscape and how they are distributed across startup types. Our study thus provides new insights into migrant startups.

Third, we contribute to the literature on startup types (Aldrich & Ruef, 2018; Kollmann & Pröpper, 2025; Kuckertz et al., 2023; Kuratko & Audretsch, 2022; Welter et al., 2017) by contributing to the diversity and distinctiveness of entrepreneurship rather than the investigation of the most visible and successful startup types, such as *Unicorns* (Kuratko & Audretsch, 2022; Morris & Kuratko, 2020). Since our analyzed startup types are based on entrepreneurial ambitions (growth, exit, and cooperation) (Kollmann & Pröpper, 2025), we also contribute to the literature on entrepreneurial ambitions (Bosma & Schutjens, 2009; Gundry & Welsch, 2001; Hermans et al., 2015; Judge & Kammeyer-Mueller, 2012; Wallin et al., 2016) by investigating their antecedents.

Moreover, in our post-hoc analysis, we contribute to the literature on risk in entrepreneurship (Caliendo et al., 2009; Das & Teng, 1998; Forlani & Mullins, 2000; Van Gelderen et al., 2005) by examining the complex role of risk propensity in shaping startup types and the associated ambitions. Specifically, we investigate how varying levels of risk propensity influence the pursuit of startup types, which are differentiated in the content and strength of entrepreneurial ambitions. By distinguishing between different types, we shed light on how risk determines the scope and scale of startups. By examining these variations, our work clarifies how entrepreneurial risk-taking behavior influences the ambitions underpinning startups' development. By doing this, we offer novel insights into the visionary processes defining entrepreneurship activities.

## 6.2 Practical Implications

Our study has important implications for founders and other stakeholders. The findings provide practical insights into the startup types and their antecedents.

When founding a startup, founders should be aware of their ambitions and those of their co-founders. The "Startup-Zoo" framework by Kollmann & Pröpper (2025) is used to classify and provide an overview of these ambitions. Conclusions can be drawn from the founder's gender and cultural background regarding startup types and their ambitions, which should be seen as tendencies. Our results help founders to reflect on their risk propensity. For example, a female entrepreneur tends to have *Zebra* ambitions, and a male entrepreneur is likelier to have *Unicorn* ambitions in the entrepreneurial context. Furthermore, a non-migrant founder is inclined to pursue *Zebra* ambitions, while a migrant founder is expected to seek *Unicorn* ambitions. This could indicate choosing co-founders with the same or similar ambitions. On the contrary, knowing the gender distribution and cultural background of startup types may help founders build teams with diverse ambitions and skills. This may help to build a balanced team that is able to cope with the various demands and challenges of the startup process. The same applies to risk propensity. However, it is essential to mention that gender, culture, and willingness to take risks should not be the only factors in choosing co-founders for the foundation. Moreover, we do not declare which startup type is the best. Every startup type has a great benefit for the startup ecosystem.

## 7. Limitations and Future Research Directions

Like all empirical studies, our study has limitations that offer meaningful avenues for future research. First, entrepreneurial ambitions, gender in entrepreneurship, and risk propensity may differ geographically (Capelleras et al., 2019; A. Elam et al., 2023; Keil et al., 2000; Stam, 2021). Our study is restricted to startups in Germany. The results could be diverse in other countries. Future research should investigate our research model in other nations.

Second, startup types and their entrepreneurial ambitions, especially growth ambitions, may be subject to changes over time (Bosma & Schutjens, 2009; Dutta & Thornhill, 2008). Thus, a startup may mutate into another one over time. Since our data did not allow us to map how the startup types and their ambitions might change, we could not perform a process analysis. We believe that future research should complement our findings by investigating the dynamic structure of startup types.

Third, ambition/startup types are individual, so everybody in a founding team is able to pursue different ambitions for the future of his startup. The variables of one founder of the respective founding team were analyzed. Thus, co-founders may have different ambitions, be of another gender and cultural background, and have diverse risk propensities. Thus, they see themselves as a different startup type. Future research should analyze the startup type and their ambitions of the whole founding team.

Fourth, our surveys were conducted during the COVID-19 pandemic, which has affected the results. Future research could validate the framework in a normalized economic and social situation.

Fifth, in the past, *Unicorns* were measured by their financial performance metrics (Aldrich & Ruef, 2018; Kotha et al., 2022). The startup types in this study were classified based on entrepreneurial ambitions according to a future-oriented approach (Kollmann & Pröpper, 2025). The number of startups that are real *Unicorns* in practice is very small worldwide. As of October 2023, 1,220 *Unicorns* with a total cumulative valuation of around \$3,831 billion exist in the market worldwide (CB Insights, 2023). In research, the number of ventures with *Unicorn* ambitions is much higher (Kollmann & Pröpper, 2025). However, these ambitions will become a reality only in very few cases. Because of this, entrepreneurial ambitions and a company's financial valuations do not necessarily agree.

Furthermore, we have not investigated why female and male entrepreneurs, their cultures, and risk propensity differ in the following different startup types. Future research should analyze the reasons for these differences.

Our study does not further differentiate the migration/cultural background between countries, continents, or religions. Future research could integrate these variables.

Last, future research is called for investigate additional antecedents that may affect startup types, such as personal characteristics (e.g., confidence in their abilities, need for achievement, creativity, innovative drive), socio-demographic factors (e.g., age, level of education, professional experience), social environment (e.g., social networks, support from family and friends), and cultural and societal factors (e.g., regulation and institutional support).

### **Authors' contributions**

All authors contributed equally to the content and read and approved the final manuscript.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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