

## **Master Thesis**

# Fear of Failure in Female Entrepreneurship in Austria: Review, Insights and Recommendations

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## **Abstract**

Fear of Failure in Female Entrepreneurship in Austria: Review, Insights and Recommendations

Fear of failure is a major factor influencing entrepreneurial actions. Since the female quota for startups and self-employment is still lower than for men, the aim is to determine the extent to which the fear of failure is incorporated into the entrepreneurial actions of women in Austria. The trailblazer and pioneer in female entrepreneurship America is used as an international benchmark for evaluation. A quantitative survey was conducted among women from Austria and America on their fears of failure related to self-employment and their aspirations to become self-employed. There were significant differences in the quantitative study between self-employed and non-self-employed women, irrespective of their country of origin. As a result, recommendations for action were created to reduce the influence of Fear of Failure on entrepreneurial actions of Austrian women.

Keywords: Fear of Failure, Female Entrepreneurship, Entrepreneurship

## **Kurzreferat**

### **Fear of Failure im Female Entrepreneurship in Österreich: Einblicke und Empfehlungen**

Die Angst vor dem Scheitern ist ein bedeutender Faktor, der das unternehmerische Handeln beeinflusst. Da die Frauenquote bei Gründungen und Selbstständigkeit immer noch niedriger ist, als die der Männer, ist es das Ziel zu ermitteln, inwieweit die Fear of Failure in das unternehmerische Handeln von Frauen in Österreich einfließt. Als internationaler Benchmark im Female Entrepreneurship wird der Vorreiter Amerika herangezogen. In einer quantitativen Befragung werden Frauen aus Österreich und Amerika zu ihren Versagensängsten im Zusammenhang mit der Selbstständigkeit befragt. Die Studie zeigt signifikante Unterschiede zwischen selbständigen und nicht-selbständigen Frauen, unabhängig von ihrem Herkunftsland. Als Ergebnis werden einige Handlungsempfehlungen erstellt, um den Einfluss von Versagensängsten auf das unternehmerische Handeln österreichischer Frauen zu verringern.

**Keywords:** Fear of Failure, Female Entrepreneurship, Entrepreneurship

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## **Abbreviations & Symbols**

Global Entrepreneurship Monitor: GEM

Fear of failure: FOF

Fear of success: FOS

Female Entrepreneur Index 2015: FEI 2015

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# **1. Introduction**

The introductory chapter of this thesis clarifies the significance and intentions of this scientific master's thesis. It first describes the relevance of the research topic and then highlights the resulting research gap. Lastly, it presents the overall structure of the thesis.

## **1.1 Importance of Research Topic**

In the field of psychology and mental health, fear of failure (FOF) is referred to as the irrational and persistent fear of failing (Cherry, 2021). Though failing is obviously not a desired outcome for anyone, this fear can sometimes significantly threaten people's motivation and resulting actions. There are many emotions connected to FOF, such as anger, frustration and sadness (Winch, 2013). The literature has often mentioned women in the context of FOF (Grodén, 2016; Parker, 2015). Not only are women in general often associated with FOF, but they are also said to be less successful professionally because of FOF (Ranganathan, 2019). However, according to a CNBC and SurveyMonkey's study, 54% of the female participants mentioned that they are "very ambitious" regarding career goals, while 35% said that they are "somewhat ambitious" (Connley, 2020). This is surprising given that, even today, there are only 73 women for every 100 men hired as managers (Connley, 2020).

Some literature also claims that women are less willing to take risks (Elisa Ughetto et al., 2019, p. 306). The fashion magazine *Elle* states that women are so afraid to fail, that they do not apply for jobs, if they do not feel they are 100 % qualified (Grodén, 2016). This might be one of the causes of the still existing gap between female and male entrepreneurs. According to the Austria's 2021 microcensus, there were 4,306,000 self-employed persons on average, with 2,288,800 of them being men and 2,017,300 women (Statistik Austria, 2021). While the figures vary by country, there are more male entrepreneurs throughout all industrialized countries worldwide (Grieß, 2015).

The 2015 Female Entrepreneurship Index provides a more detailed perspective on this topic (Terjesen & Lloyd, 2015). This index compares 77 countries whose institutions support female growth in entrepreneurship. While Austria appears in the first half of all participants, it is not in the top 10. The first three places are held by the US, Australia, and the UK (Terjesen & Lloyd, 2015, p. 2). As the first rank, the US particularly offers an inviting comparative value to Austria. The 2021 Austrian Startup Monitor also provides interesting insights here. For the past three years, the share of female founders has remained unchanged for three years at around 17% (Leitner et al., 2022, p. 10). Given this context, it

is important to examine the factors where Austria differs more closely from the top countries and how this relates to FOF. This thesis aims to validate how FOF affects women in context of self-employment.

## 1.2 Research Gap and Research Question

After reviewing and analyzing a wide range of literature on FOF and women in the context of self-employment, the author set up as a literature matrix. Findings on recent developments in FOF were generally found online in blogs and articles, though FOF has also become a critical issue in some areas of academic literature. Nevertheless, few researchers have addressed the problem of FOF in the context of women, especially female entrepreneurship. To provide a better overview, Figure 1 summarizes the basic research in a matrix for comparison purposes.

Literature	Type of Literature	Concepts				
		Psychology, mindset, personality development	Female entrepreneurs	Women in general	Entrepreneurship & leadership	Fear of failure
The Shame of Failure: Examining the Link Between Fear of Failure and Shame (McGregor & Elliot, 2005)	Paper	x				x
The Fear of Failure: How To Become An Action Taker, Stop Worrying, Overcome Procrastination and Perfectionism (Hale, 2021)	Book	x				x
Motivated but not starting: how fear of failure impacts entrepreneurial intentions (Ng & Jenkins, 2018)	Paper	x			x	x
Gender Differences in Fear of Failure amongst Engineering Students (Nelson et al., 2013)	Paper	x		x		x
When fear of failure leads to intentions to act entrepreneurially: Insights from threat appraisals and coping efficacy (Hunter et al., 2021)	Article	x			x	x
Aspiring to succeed: A model of entrepreneurship and fear of failure (Morgan & Sisak, 2015)	Paper	x			x	x
Failing role models and the formation of fear of entrepreneurial failure: a study of regional peer effects in German regions (Wyrwich et al., 2019)	Paper				x	x

Socio-cultural factors and female entrepreneurship (Noguera et al., 2013, p.)	Paper		x		x	
What's new in female entrepreneurship research? Answers from the literature (Poggesi et al., 2016)	Paper		x		x	
A reconceptualization of fear of failure in entrepreneurship (Cacciotti et al., 2016)	Paper				x	x
Afraid Of Opportunity: The Effects Of Fear Of Failure On Entrepreneurial Action (Mitchell & Shepherd, 2011)	Paper				x	x

Figure 1: Literature Concept Matrix

Source: Own presentation

Furthermore, one weakness of the FEP 2015 is that its analysis is limited because it does not provide details related to specific data and indicators. Previous work has also been failed to address the differences in FOF between self-employed women and women who are not self-employed or do not and have a wish to become self-employed. To fill these research gaps, the current study responds to the following research question:

### **What are the effects of FOF on female entrepreneurial actions in Austria?**

In addition, this research question involves the following sub-questions:

- How do the fears of self-employed and non-self-employed women in Austria differ from those of women from the US and is failure associated positively?
- To what extent do the fears of already self-employed women in Austria differ from those of non-self-employed women?
- How do the fears of women who desire self-employment differ from women who are already self-employed?
- How do successful women feel in Austria? What are the differences between self-employed and non-self-employed women?
- What recommendations for actions can support female Austrian women to overcome their FOF?

To answer the research question and sub-questions, this study first involves a deeper literature review of female entrepreneurship and FOF to build its theoretical framework. Furthermore, to identify if there is an existing difference between women from Austria and the US, the author selected primary data using quantitative research.

## **1.3 Structure**

The main purpose of this paper is to analyze the impact of FOF in the context of female entrepreneurship in Austria. To ensure the best possible traceability of all efforts made to answer this research question, this thesis is divided into the following five chapters: introduction, theoretical framework, methodology, results, and conclusion.

The introduction intends to introduce the topic, clarify the research gap, and to outline the structure of this thesis. The theoretical framework chapter provides a basic understanding of what entrepreneurship, female entrepreneurship, and the concept of FOF. In addition, this chapter serves as a foundation for the derivation of the hypotheses. The third chapter then presents the methodology and its procedure and describes the research model. Finally, the last two chapters evaluate and analyze the research data.

## **2. Theoretical Framework**

This chapter aims to address important terms and concepts related to the research topic and build a fundamental framework for responding to the research question. The chapter first discusses the general topic of entrepreneurship before moving to the role of women in entrepreneurship and finally the concept FOF.

### **2.1 Entrepreneurship**

#### **2.1.1 Definition**

There are different definitions for the term entrepreneurship. The word originally comes from the French verb “entreprendre,” which means “to do something” (Fritsch & Wyrwich, 2021a, p. 6). Generally, entrepreneurship refers to self-employment and owning a company and an entrepreneur is defined as a person who plans the creation of a business, successfully establishes it, and is then responsible for its management and leadership (SevDesk, *n.d.*).

Today, however, the term entrepreneurship is not only connected with self-employed people and has become a broader concept. Joseph Alois Schumpeter, an Austrian-born 20<sup>th</sup>-century economist, was the first economist to introduce the concept of entrepreneurship. In his view, the entrepreneur is a revolutionary who is responsible for dynamic change within an economy. Entrepreneurs with an entrepreneurial spirit, “Unternehmergeist” in German, are accountable for innovation and technological development (Liberto, 2022). In their book

*Die Rolle von Entrepreneurship in Wirtschaft und Gesellschaft*, Fritsch and Wyrwich (2021a) refer to certain entrepreneurial characteristics and behaviours such as creativity, innovation, entrepreneurial initiative, and economic risk-taking. These forms of entrepreneurship represent a central driving force for economic development. The characteristics of entrepreneurship are often associated with new and young enterprises and entrepreneurs, which is why startups are usually at the center of entrepreneurship research (Fritsch & Wyrwich, 2021a, p. 3). Other literature also refers to entrepreneurship as primary involvement in the founding of innovative companies and the creation of new economic structures, including other variants such as the purchase of a company or the sale of licenses (Fueglistaller et al., 2019, p. 1).

Furthermore, entrepreneurship also involves the process of founding a company or business, including the development of a business plan, hiring of labor, acquisition of resources and financing, and provision of leadership and management (Hyes, 2021).

In summary, authors from different disciplines have made significant contributions to the topic of entrepreneurship. The diversity of disciplinary backgrounds on this topic is probably one of the main reasons why no standardized definition of the term has been established (Fritsch & Wyrwich, 2021a, p. 8). The spectrum of the term entrepreneurship ranges from self-employment and company management to the creation of new disruptive ideas and technologies and entrepreneurial thinking and mindset. This thesis uses this broad scope of the term entrepreneurship. It includes individuals who pursue self-employment as well as founders who create a startup with an innovative idea.

### **2.1.2 Key Elements of Entrepreneurship**

This section provides a detailed overview of the elements of entrepreneurship is given. In this context, reference is made to the model of U. Fueglistaller, A. Fust, C. Müller, S. Müller and T. Zellweger (Fueglistaller et al., 2019, pp. 8-14). As the below figure shows, Fueglistaller breaks entrepreneurship down into five key elements: entrepreneur, entrepreneurial opportunity, resources, organization, and environment.

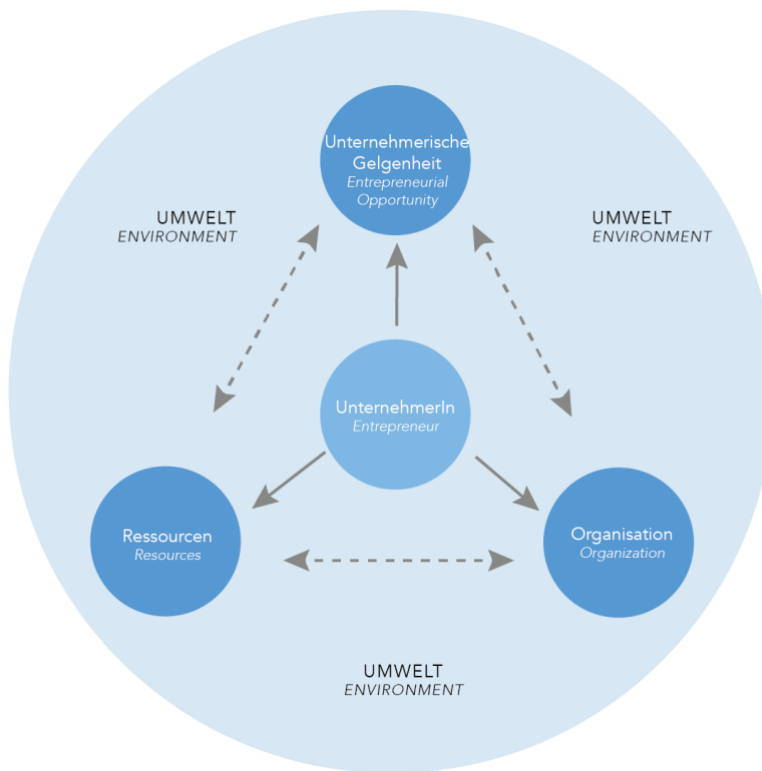


Figure 2: Key elements of entrepreneurship

Source: Fueglistaller et al., 2019, p. 8)

### 2.1.3 Entrepreneur

In entrepreneurship, the focus is on the person, the entrepreneur. These people are the core of the entrepreneurial processes as founders, leaders, and managers. The mindset of the entrepreneur is also crucial. In their book, Fritsch and Wyrwich examine what motivates a person to make the choice to become an entrepreneur (Fritsch & Wyrwich, 2021b). For them, entrepreneur describes a personality that is willing to bear great responsibility and high risk (Fritsch & Wyrwich, 2021b). As previously mentioned in section 2.1.1, an entrepreneur also refers to the regular context of self-employment in this thesis.

### 2.1.4 Entrepreneurial Opportunity

An entrepreneurial opportunity is defined as an opportunity to develop a new product, service, or method (Fueglistaller et al., 2019, p. 10). In other models opportunities have been defined as “situations in which new goods, services, raw material, and organizing processes can be introduced and sold at greater than their cost of production” (Shane &

Venkataraman, 2000, p. 220; Bosse et al., 2022, p. 1). When an idea becomes an opportunity there is an apparent consumer demand which can then be satisfied with a new or developed product or service. (OpenStax, n.d.). On his blog, technology venturing professor Erkki Autio writes:

*“Entrepreneurial opportunities are usually defined as situations where products and services can be sold at a price greater than the cost of their production. An ‘entrepreneurial opportunity’, thus, is a situation where entrepreneurs can take action to make a profit.” (Autio, 2015)*

Other authors describe the connection and process between entrepreneurs and their stakeholders, which can be defined as an entrepreneurial opportunity (Alvarez et al., 2020, pp. 287–288). Entrepreneurial opportunities arise when specific individuals have access to the value of resources (Barney et al., 2001, p. 628). In summary, entrepreneurial opportunity is an opportunistic business model that is identified by entrepreneurs. Such an opportunity can be the motivation for starting a business, but opportunities can also arise during businesses. However, the entrepreneur should have the goal and mindset to recognize such opportunities and, if necessary, be able to take advantage of them.

### **2.1.5 Resources**

Once entrepreneurs have identified an entrepreneurial opportunity, they must apply the available resources. The opportunity in the market should be utilized and organizationally implemented (Fueglistaller et al., 2019, p. 11). For this purpose, everything that is useful for the implementation or further development of the business model can serve as a resource (Fueglistaller et al., 2019, p. 11). Fueglistaller, however, differentiates among financial, physical, human, technological, social, and organizational resources (Fueglistaller et al., 2019, p. 11). Furthermore, Penrose (1959) has presented a resource-based view, which describes internal managerial resources as drivers and limits to a company’s growth (Lowe & Teece, 2001, pp. 3574–3578).

In managerial entrepreneurship, effectuation is an independent, non-causal decision-making logic that entrepreneurs use in situations of uncertainty (T2Informatik, n.d.).

### **2.1.6 Organization**

The organizational structure of a business can vary. All different types of business activity offer the opportunity to realize the potential of an entrepreneur. This may be done by either

founding a startup or a joint venture or subsidiary within an existing company. Sometimes even the establishment of a project team is even sufficient (Fueglistaller et al., 2019, p. 11).

### 2.1.7 Environment

The environment plays an essential role for entrepreneurs. To start and run a business companies are not only in constant contact with stakeholders, but also have many dependencies. In entrepreneurship, different created models can be found to analyze the environment. One highly renowned model is PESTEL analysis, which evaluates external opportunities and risks (political, economic, social, technological, environmental, and legal; Corporate Finance Institute, n.d.). PESTEL analysis enables entrepreneurs to describe the business environment in terms of specific market conditions, developments and their effects as well as create a solid basis for management decisions (Thobald, n.d., p. 3). Another frameworks that is used to analyze a business environment is Porter's 5 forces (Dobbs, 2014, pp. 32–45). As a complement to these two models, SWOT analysis is also often added to examine strengths, weaknesses, opportunities, and threats (Kaufmann, 2021, p. 289).

In addition to the above classic models, there are also newer models and design process methods in entrepreneurship for mapping the environment of a company. In his book *Digital Entrepreneurship*, Sebastian Pioch refers to the modelling of a company's functions. He describes how value is created regarding the dimensions of resources, customers. and revenue mechanisms (Pioch, 2019, p. 9). In addition, the so-called *business model canvas* is a widely used and popular model to develop a business model. The model in Figure 3 is based on the illustration by Osterwalder and Pigneur (as cited in Pioch, 2019, p. 9, ).

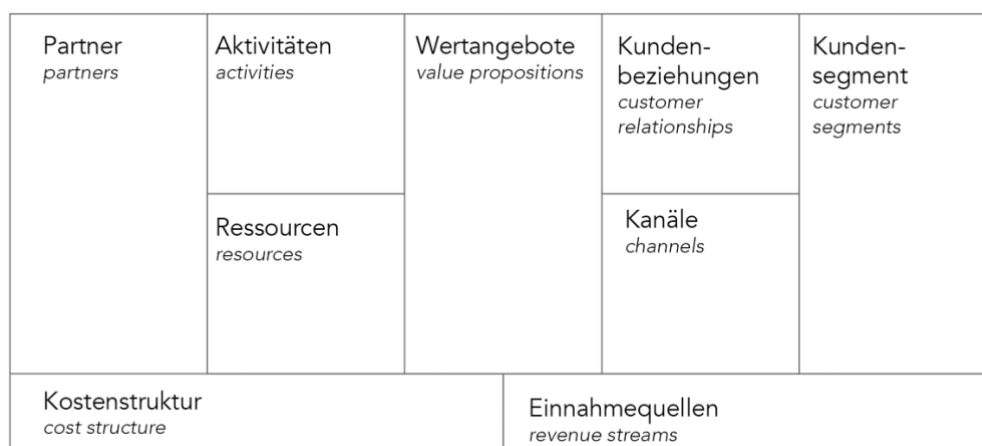


Figure 3: Business model canvas

Source: Own illustration based on Osterwalder et al., (2011, p. 22)



### **2.1.8 Summary**

In summary, while entrepreneurship can be used in relation to self-employment in general, but it is also a highly specific concept. There are key elements of entrepreneurship that compose its main components. In addition, the environment exerts an essential role on self-employment in addition to entrepreneurs themselves. Further topics such as women in entrepreneurship and FOF are mostly related to entrepreneurs themselves and to the surrounding environment.

## **2.2 Female Entrepreneurship**

### **2.2.1 Definition**

After the introduction to entrepreneurship in general, this section discusses female entrepreneurship in greater detail. Interest in research on female entrepreneurship from public organizations and academia has increased significantly (Noguera et al., 2013, p. 184). Increasing amounts of data are being collected to identify women's influence in the global economy, where women represent a powerful force in our economic and social development (Terjesen & Elam, 2012, p. 1).

The definition of "female entrepreneurship" is quite difficult, and most studies use a wide scope of the term (Terjesen & Lloyd, 2015, p. 5). Similarly to the term "entrepreneur", female or women entrepreneurship can be used for especially innovative female founders (Aradhya, *n.d.*).

### **2.2.2 Factors**

Significant scientific research has been conducted on the difficulties and barriers that hinder women from becoming entrepreneurs in particular (Cardella et al., 2020). In general, internal factors such as the willingness to take risks, FOF, and other characteristics can influence people to become entrepreneurs. However, there are also external factors that can create obstacles and barriers.

First, one's cultural and religious background represents a highly significant barrier (Terjesen & Lloyd, 2015, p. 5). Here, of course, cultures differ from one another. Furthermore, institutions influence women's basic rights, access to education, networks, technology, capital, social norms and values (Terjesen & Lloyd, 2015, p. 5). Overall, the combined impact of gender-specific factors, social norms and beliefs can lead to restricted access to essential resources for the development of women's entrepreneurship, such as education, skills, and financial situation (Terjesen & Lloyd, 2015, p. 7). Each country has its own entrepreneurial culture, which differs with other countries but also among genders within the same country. Mindset is also essential in the formation of a country's entrepreneurial culture. As Hofstede notes, culture directly manifests the way people behave and think (Castillo-Palacia et al., 2017, p. 3; as cited in Hofstede, 1984). Culture is also able to influence the personal values and behaviour of a person. Therefore, national culture can either support or hinder entrepreneurial behaviour at the individual level (Hayton et al., 2002, p. 33).

FEI 2015 examines exactly which factors influence women to become self-employed. The index compares these factors at the country level to determine institutional factors. Focus is on defining a country's strengths and weaknesses in context of female entrepreneurship. As previously states, 77 countries were analyzed in the latest and most recent report in 2015. These three leading countries are compared with Austria in this chapter.

### **2.2.3 International Differences in Female Entrepreneurship**

One of the most unique elements of the FEI 2015 is that it considers individual and institutional factors in equal measure (Terjesen & Lloyd, 2015, p. 6).

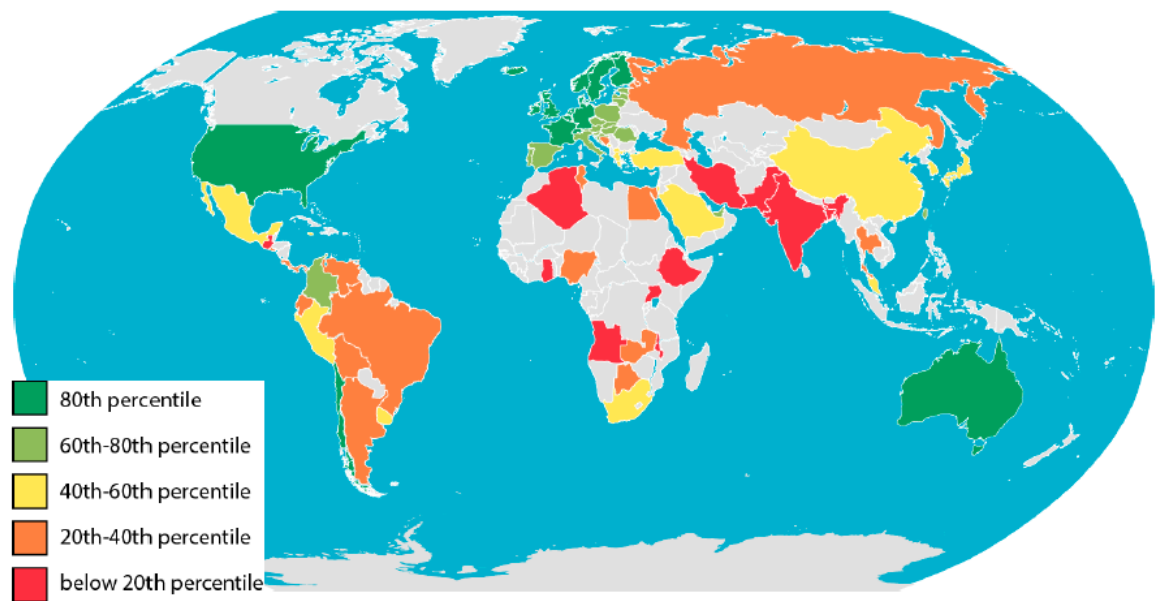


Figure 4: Country overview according to the FEI 2015 score, p. 10

Source: (Terjesen & Lloyd, 2015)

The FEI 2015 is based on a framework of three so-called sub-indexes that are each supported by 15 pillars. The three sub-indexes to be measured are environment, ecosystem, and aspirations (Terjesen & Lloyd, 2015, p. 6). This graphic illustration provides a clear impression of the result of the FEI 2015 scores. The colour coding ranges from the lowest scores in red to the top countries in dark green. Austria, in light green, is among the countries that rank close to the top category. Compared with countries that are low or even in the yellow-red range, Austria's ranking of 23 is quite positive. However, this study seeks to examine more closely what should be improved at the institutional level and in the area of FOF as compared with the top countries. In particular, it compares Austria with the top three countries: the UK, the US, and Australia.

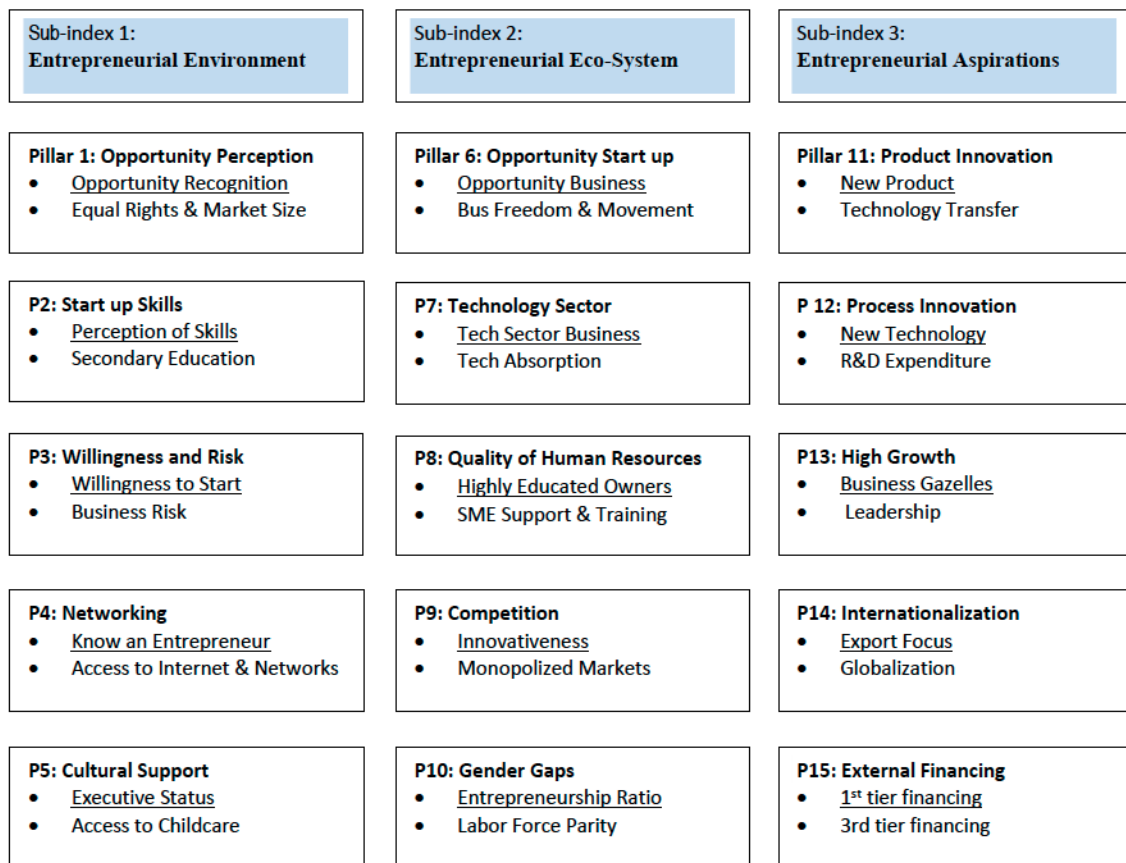


Figure 5: The 2015 Female Entrepreneurship Index Framework

Source: (Terjesen & Lloyd, 2015, p 35)

Figure 5 above shows the framework and the factors that it highlighted. The underlined factors symbolize an individual level indicator. In this thesis, the focus is on the pillar 3 of sub-index 1: willingness and risk with the sub-items willingness to start and business risk, because FOF is a part of it (Terjesen & Lloyd, 2015, p. 36). The calculation of the 15 variables in Figure 5 in the FEI 2015 results from international data sources. The pillars were then constructed and normalized (p. 36). The 15 pillars of Austria are shown below in Figure 6. For comparison, the top 3 countries of the FEI 2015 are also shown in Figures 7-9 (United States, Australia, and United Kingdom).

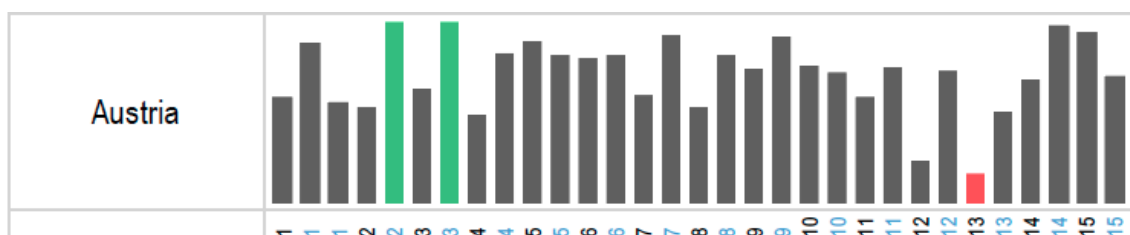


Figure 6: Austria (Score 54.9, Rank 23)

Source: (Terjesen & Lloyd, 2015, p. 18)

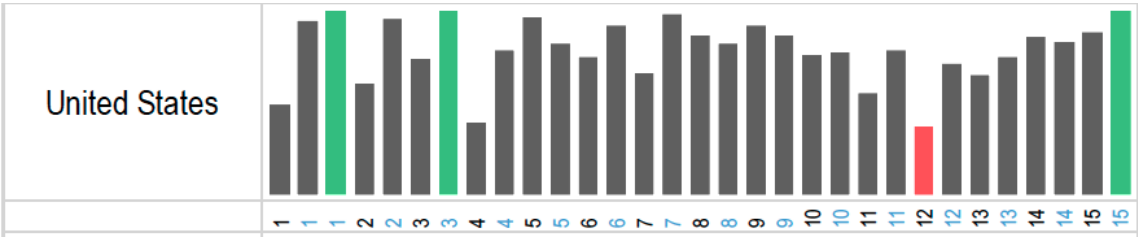


Figure 7: US (Score 82.9, Rank 1)

Source: (Terjesen & Lloyd, 2015, p. 32)

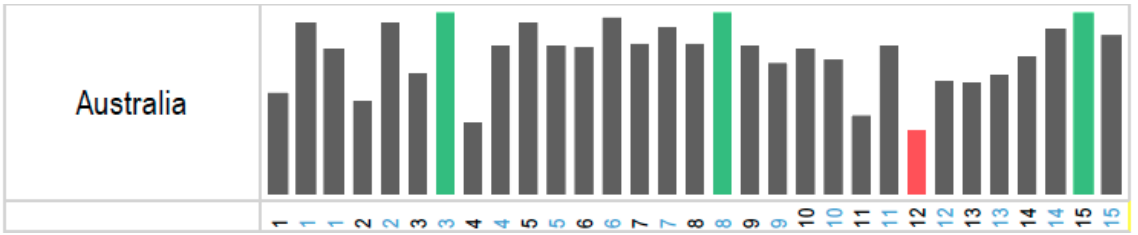


Figure 8: Australia (Score 74.8, Rank 2)

Source: (Terjesen & Lloyd, 2015, p. 18)

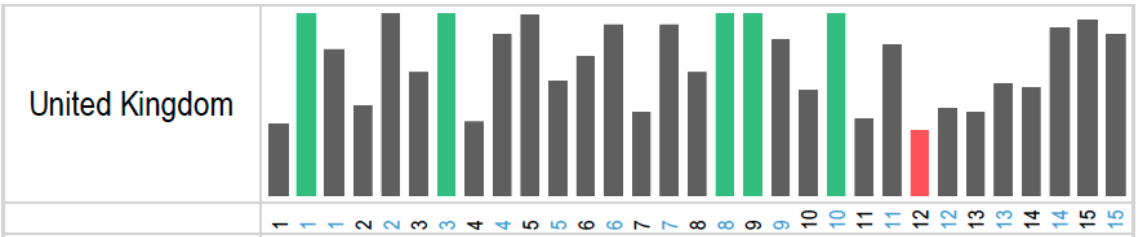


Figure 9: UK Score (Score 70.6, Rank 3)

Source: (Terjesen & Lloyd, 2015, p. 32)

At first, the differences in scoring between Austria and the other countries do not seem significant nor overly pronounced. However, the top three countries have more green bars, which symbolizes a high score. Furthermore, pillar 3 distinguishes between willingness to start and business risk (Figure 10). FOF is measured in willingness to start in the FEI 2015 index.



Figure 10: Willingness to Start

Source: (Terjesen & Lloyd, 2015, p. 18)

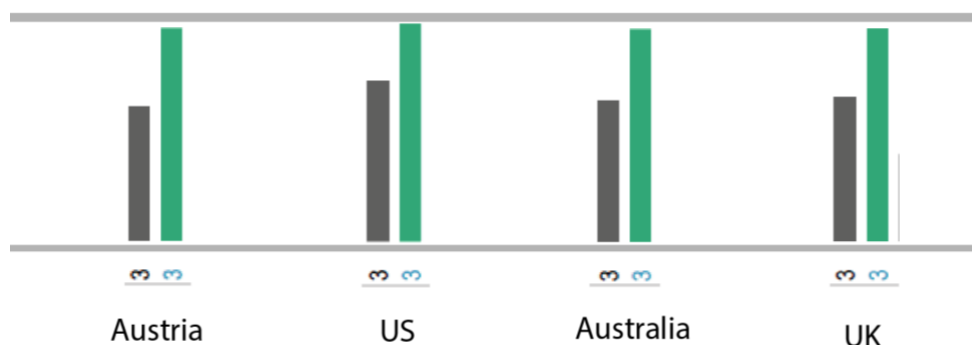


Figure 11: Austria in comparison Willingness and Risk

Source: (Terjesen & Lloyd, 2015, p.18-32)

Figure 11 shows gives an overview of the comparison of pillar 3. Austria appears to be in a similar range with the other countries. However, the US, Australia, and the UK are minimally stronger regarding the two pillars. According the index, willingness to start measures the percentage of the female population who do not believe that FOF will stop them from becoming entrepreneurs (Terjesen & Lloyd, 2015, p. 36). Furthermore, business risk is explained as follows:

*“For a more macro view, we combine ‘Willingness to Start’ with the institutional variable ‘Business Risk’, which reflects the availability and reliability of corporate financial information, the protection of creditors by law, and the institutional support of inter-company transactions.” (Terjesen & Lloyd, 2015, p. 36)*

One notable result is that business risk has a higher value than the FOF in Austria.

## 2.2.4 Female Entrepreneurship in Austria

The recently published 2021 Austrian Startup Monitor shows the current startup figures of startup founders in Austria. The monitor’s article indicates that the share of female founders has stagnated at the rather low level of 17% over the last three years (Leitner et al., 2022). Only 2% of startups in Austria were founded by female teams and 7% as female solo-startups (Leitner et al., 2022, p. 48). Of all startups in Austria overall, 28% are mixed teams with men and women. (Leitner et al., 2022). Regarding former startup experience, the monitor highlights that considerably fewer women have already founded startups in the past than men. Of all female founders from Austria, only 2% are considered "serial

entrepreneurs" (Leitner et al., 2022, p. 50), which means that they have already founded more than one business. The monitor suggests that women may not start a business again after a failure (Leitner et al., 2022, p. 50).

Moreover, the monitor evaluates the age of female founders (Leitner et al., 2022). Interestingly, the female founders are younger than the male founders. Half of the female founders are 33 years old or younger (Leitner et al., 2022, p. 52). Regarding education, female founders also have noticeably higher educational qualifications than men. Specifically, 54% of women have a master's or diploma degree and 20.4% have a bachelor's degree (Leitner et al., 2022, p. 52). These data are interesting regarding FOF, as there may be an assumption that perhaps younger women feel less FOF than the older women. As previously discussed in section 2.2.3, Austria has performed positively regarding women's entrepreneurship overall. However, the US is considered a pioneer, as they are on the first position of the FEI 2015 and is therefore compared with Austria in this thesis. When examining the startup figures from the US in comparison with Austria, we see a significantly higher number, specifically women in at least 28% of 2020 startup teams in the US (Statista, 2022).

### **2.2.5 Summary and resulting Hypothesis**

Following the comparison between Austria and the top three countries from the FEI 2015 index, this paper explores possible differences between women from Austria and the US. According to the index, there are small differences regarding FOF between the two countries. Based on the interesting findings from the Austrian Startup Monitor, hypotheses on age and self-employment can also be extracted here.

The resulting hypotheses are as follows:

*Hypothesis 1: US women are less afraid of failure than Austrian women.*

*Hypothesis 2: Austrian women who are not self-employed have higher FOF than self-employed Austrian women.*

*Hypothesis 3: Austrian women with the wish for self-employment have higher FOF than self-employed Austrian women.*

*Hypothesis 4: There is a positive relationship between education level and self-employment rate.*

*Hypothesis 5: Younger women are less afraid of failure than older women, among all female participants.*

## **2.3 Fear of Failure (FOF)**

The previous sections have focused strongly on entrepreneurship in general and female entrepreneurship in particular. This section now provides a detailed examination of FOF.

### **2.3.1 Definition**

The term “fear of failure” is generally understood to refer to the immense and sometimes irrational (Cherry, 2021) fear or anxiety of failing. In the literature, there seems to be no general consensus on a definition for this term. In the area of personality development, it is often referred to as a mindset that can negatively affect people in their behavior (Cherry, n.d.). In entrepreneurship, the term is well established and widely used (Chua & Bedford, 2015, p. 320). Here, FOF is understood as the concept of an aversion to risk (Hunter et al., 2021, p. 409). In broad terms, FOF can be defined a factor that prevents people from starting their own business or even from making risky decisions while running a business. Other scholars perceive FOF as a sociocultural trait (Chua & Bedford, 2015, p. 322). Cacciotti (2015) writes in her dissertation that the focus of the literature has been on FOF as a distinguishing characteristic of people, whereby FOF is interpreted by her more as a condition felt by many people (p. 10).

Furthermore, FOF relates to the consequences of failure that part of one's fear. Such consequences may include shame, feelings of embarrassment, devaluation of one's self-worth, and fear of an uncertain future (Conroy & Coatsworth, 2004, pp. 193-214). Individuals who are said to have a high FOF often have problems with self-esteem and lower self-confidence. They are not sure of their success, and FOF is therefore increased (Nelson et al., 2013, p. 11). One source indicates that motivation is likely to serve as the underlying foundation for FOF (Albury, 1982, p. 9). The concept of motivation influences and impacts the actions of all individuals. According to Atkinson and Feather (Atkinson & Feather, 1966), motivation has two motives: the hope of success and the other is the fear of failure.

### **2.3.2 Fear of Failure in Entrepreneurship**

Most sources interpret the impact of FOF as negatively (Albury, 1982; Cacciotti et al., 2016; Nelson et al., 2013). Nevertheless, some sources have identified FOF as a motivating influence that can even help entrepreneurs to make better decisions (Hunter et al., 2021, p.



411). The origin of FOF can be traced back to a concept related to parents' educational socialization of their children, as children are often taught that there is punishment after failure and reward after success (McGregor & Elliot, 2005, p. 2019). Nevertheless, the focus on FOF in entrepreneurship research has not been that prominent except in academic and sports domain mainly in North America and the United Kingdom (Chua & Bedford, 2015, p. 23). Furthermore, FOF is seen as a combination of cognition, affect and action that arises as a reaction when an entrepreneur faces uncertain situations (Hunter et al., 2021, p. 411).

In the Global Entrepreneurship Monitor (GEM), the world's largest study of entrepreneurial activity, fear of failure is defined as a powerful barrier to taking advantage of opportunities and transforming entrepreneurial ventures into entrepreneurial action (Cacciotti, 2015). As a figurative metaphor, Cacciotti (2015) compares base jumpers to entrepreneurs because both take a leap into the unknown as the decision made beforehand is an act of courage.

### **2.3.3 Fear of Failure in context with Women**

In general, FOF in context with women has often been highlighted in online articles and blog posts. For instance, *Elle* magazine claims that women identify more with failure and feel more judged than men:

*"Women Can Be So Afraid of Failure That They're Disinclined to Even Try."*  
(Grodén, 2016)

This statement describes many people's assumption that FOF discourages women from taking risks. Especially in the professional and educational context, the fear of doing something wrong, not being able to do something, or not being good enough is said to keep some women from taking risks (Banks, 2018; Kramer Jennings, 2019). Fears associated with self-employment among women are often related to work-life balance and financial insecurities (Banks, 2018). Rachel Simmons' online article on girls, boys, and their fears of failure in school claims that the reactions of the two genders are different. Girls associate failure more with personal lack of ability, whereas boys attribute failure to circumstances (Simmons, 2015).

However, the FOF factor also exists in the GEM, which asks whether FOF prevents people from starting their businesses. However, the participation of the FOF factor in the GEM report has also been criticized. For example, some argue that there is no precise definition or conceptualization of FOF in the GEM (Chua & Bedford, 2015, p. 322). In his thesis, Albury (1982) also notes that the fear of success (FOS) plays a big role, especially for women, in

addition to FOF (p. 17). Another source describes the female FOF as an extension to the concept of "shame" as a core emotion (McGregor & Elliot, 2005, p. 227).

According to Cacciotti et al.'s (2020), FOF can be divided into different dimensions (more on this in point 2.3.4. below). One dimension is, among others, the "ability to fund a venture" (Cacciotti et al., 2020, p. 6. This describes the fear that funding the venture or company might be an issue. An article by CNBC mentions that American women in particular are highly self-confident regarding this ability to finance (O'Brien, 2022). This statement is mentioned here because it represents a dimension of FOF and this aspect of FOF can also be explicitly examined in relation to women from Austria.

### **2.3.4 Fear of Failure as a Conceptualization**

To respond to this thesis' research questions, the author applies Cacciotti et al.'s (2020) FOF model and scales as a guiding framework. Cacciotti et al.'s describe their model as follows:

*"In this paper, we conceptualize entrepreneurial fear of failure as a negative affective reaction based in cognitive appraisals of the potential for failure in the uncertain and ambiguous context of entrepreneurship." (Cacciotti et al., 2020, p. 1)*

Samples were used to design a multidimensional measurement that evaluates and validates entrepreneurial FOF (Cacciotti et al., 2020). Moreover, this paper examines not only the FOF of people who are not yet self-employed, but also of people who are already self-employed. Furthermore, failure is not only considered a holistic failure (i.e., all or nothing; Cacciotti et al., 2020, p. 3), but can also be a series of specific experiences and events.

Cacciotti's model is based on one developed by Miles and Huberman (Miles & Huberman, 1994). Their model aims to explain the concept of FOF by asking questions of nonindependent and independent workers (Cacciotti et al., 2020). Here, FOF is divided into seven different themes:

1. Fear about loss or the potential for loss of the entrepreneur's livelihood and stored wealth if the venture fails (Cacciotti et al., 2020, p. 3);
2. Fear about the (in)ability to perform actions or tasks associated with the pursuit of an opportunity or idea, and/or the development of the venture (Cacciotti et al., 2020, p. 3);

3. Fear about the (in)ability to generate or attract the necessary financial capital for the venture (Cacciotti et al., 2020, p. 3);
4. Fear about the true potential of the opportunity or idea on which the venture is based;
5. Fear about how others might perceive the entrepreneur should she or he take a misstep or fail entirely (Cacciotti et al., 2020, p. 3);
6. Fear about the venture team or organization's (in)ability to carry out the tasks needed for success (Cacciotti et al., 2020, p. 3);
7. Fear about the opportunity costs associated with dedicating time and resources to developing a venture that might fail (Cacciotti et al., 2020, p. 3).

In Cacciottis et al.'s previous work from 2016, she describes FOF as mainly psychological factor hindering entrepreneurial behavior. She continues that FOF can be related to entrepreneurial decision making and behavior, and it can influence or at least have an effect on entrepreneurial motivation (Cacciotti et al., 2016a, p. 2). These assumptions make it intriguing to determine whether these motivations and effects differ between women who are already self-employed and women who are not. Whether FOF or FOS, which are perhaps more prevalent among non-self-employed women with a desire for entrepreneurial action than among women who are already entrepreneurs. According to Cacciottis et al.'s (2020) assumptions, however, people who are already entrepreneurs can also be affected by FOF in their decisions.

### **2.3.5 Concept of “Fuckup nights”**

This section addresses an event concept that has worked on the topic of FOF for a few years. The so-called "fuckup nights" are a series of events that organized talks in more than 90 countries worldwide (<https://www.fuckupnights.com/>) in which people talk about their failures. “Fuckup nights” were created in Mexico, when five entrepreneurs went out after work and started talking about their business failures (Fondevila, 2019). As they thought that sharing their failure stories helped them and gave them crucial insights, they created a format for these kind of talks. Usually a fuckup night offers three speakers the opportunity to tell their stories of failure in seven minutes (Fondevila, 2019).

There are fuckup nights all over the world, but they seem to be more welcomed in the United States, due to the positive association of “failure culture” there. However, one major cultural difference is that failure still is seen as something negatively in Europe (Fondevila, 2019). Other sources also imply that there is a different association with failure when the European culture and the American culture is compared (Gratzer, 2001, pp. 18–19). Therefore, a

hypothesis is also be formulated regarding the assumption that women from the US talk more about their failures than women from Austria.

### **2.3.6 Summary and resulting Hypothesis**

In summary, Fear of Failure (FOF) is a complex concept and model that can be cognitive and affective in nature. In general, it is expected that FOF is often higher in women than in men. In addition, FOF affects people who are not yet self-employed, but also people who are already self-employed, and those who have the desire to become self-employed. The FEI 2015 index includes FOF in the willingness to risk pillar (see section 2.2.3). In this respect, Austria scored relatively well, but as compared with US in first place, there is still potential for improvement.

The resulting hypotheses on FOF are as follows:

*Hypothesis 6: US women are less afraid of the dimension "ability to fund the venture" than Austrian women.*

*Hypothesis 7: US women talk more about their failure than Austrian women.*

*Hypothesis 8: US women associate failure more positively than Austrian women.*

*Hypothesis 9: Austrian self-employed women feel more successful than not self-employed Austrian women.*

### **3. Methodology**

This chapter aims to highlight the methodological framework and aspects that underlie this empirical work. First, it determines and justifies the selected research approach and research design before moving to sample and data collection procedure. Furthermore, this chapter explains the structure of the questionnaire and outlines the measurement items used. In addition, it describes the measurement reliability and validity and presents a detailed description of the data analysis procedure is presented.

#### **3.1 Research Model**

The primary data collection for this thesis was conducted through the collection of quantitative data. In addition, a literature review was conducted for the theoretical foundations.

In the preceding theoretical foundations, 10 hypotheses were formulated. These hypotheses are then be examined and answered with the use of the collected quantitative data.

#### **What are the effects of FOF on female entrepreneurial actions in Austria?**

In addition, some sub-questions also derived:

- How do the fears of self-employed and non-self-employed women in Austria differ from those of women from the US and is failure associated positively?
- To what extent do the fears of already self-employed women in Austria differ from those of non-self-employed women?
- How distant are the fears of non-self-employed women with a desire for self-employment from women who are already self-employed?
- How successful feel women in Austria? Is there a distinction between self-employed and non-self-employed women?
- What recommendations for actions could support female Austrians to overcome their FOF?

The resulting hypothesis are listed in Table 1 below.

	Table with Hypothesis
1	<b>H1: US women are less afraid of failure than Austrian women.</b> <i>H0: US women are equally afraid of failure than Austrian women.</i>
2	<b>H1: Austrian women who are not self-employed have higher FOF than self-employed Austrian women.</b> <i>H0: Austrian women who are not self-employed have the same FOF than self-employed Austrian women.</i>
3	<b>H1: Austrian women with the wish for self-employment have higher FOF than self-employed Austrian women.</b> <i>H0: Austrian women with the wish for self-employment have the same FOF than self-employed Austrian women.</i>
4	<b>H1: There is a positive relationship between education level and self-employment rate.</b> <i>H0: There is no positive relationship between education level and self-employment rate.</i>
5	<b>H1: Younger women are less afraid of failure than older women, among all female participants.</b> <i>H0: Younger women are equally afraid of failure than older women, among all female participants.</i>
6	<b>H1: US women are less afraid of the dimension "ability to fund a venture" than Austrian women.</b> <i>H0: US women are equally afraid of the dimension "ability to fund a venture" than Austrian women.</i>
7	<b>H1: US women talk more about their failure than Austrian women.</b> <i>H0: US women talk the same about their failure than Austrian women.</i>
8	<b>H1: US women associate failure more positively than Austrian women.</b> <i>H0: US women associate failure equally positive than Austrian women.</i>
9	<b>H1: Austrian self-employed women feel more successful than not self-employed Austrian women.</b> <i>H0: Self-employed women in Austria feel equally successful than not self-employed women.</i>

Table 1: Table with Hypothesis

Source: Own presentation

## 3.2 Research Approach and Design

The theoretical foundations serve as the basis for the resulting hypotheses. This deductive approach moves from theory to data findings (Saunders et al., 2009, p. 127) and involves hypothesizing based on existing ideas and then collecting data to test the conjectured hypotheses (Bryman & Bell, 2011, p. 11).

The research strategy for this work involved conducting a survey. This study aims to test the FOF of women in the context of self-employment between the US and Austria. Quantitative research is suitable for this purpose because it deals with the process of collecting and analyzing numerical data (Bhandari, 2021).

Due to the limited time frame of this work, a cross-sectional study using a survey is the most suitable approach. In a cross-sectional study, data are collected at a particular point in time (Cherry, 2019) and not over a longer period of time, as is the case with longitudinal studies (Saunders et al., 2009, p. 155).

They survey data collection was conducted via a self-administered questionnaire that was distributed online (Saunders et al., 2009, p. 362). This method was chosen because of the importance of reaching the particular population and the required sample size.

The risks with an online questionnaire are the low response rate and a relatively high potential that not all participants complete it. To increase the response rate, an appealing and motivating questionnaire layout and design were used and the support of providers with participant pools was obtained.

### **3.3 Measures and Variables**

This chapter describes the measurement variables for the study. The fundamental variable in the survey is the question about self-employment. Participants are asked whether they are self-employed, not self-employed with a desire for self-employment, or not self-employed without a desire for self-employment.

As previously stated, this study applies Cacciotti et al.'s (2020) model to measure FOF. Cacciotti created a measure in 2020 that measures entrepreneurial FOF based on seven factors (Cacciotti et al., 2020).

The guidelines of Cacciotti et al.'s work (2020) refer to both a six-factor-model and a seven-factor-model, but it is recommended to use the seven dimensions, which are shown in Figures 12 and 13 below (p.21).

F	Ability to fund the venture
PI	Potential of the idea
TSE	Threat to social esteem
OE	Opportunity costs
PA	Personal ability
FS	Financial Security
VE	Ventures capacity to execute

Figure 12: Dimensions of entrepreneurial FOF

Source: (Cacciotti et al., 2020, p. 22)

Instructions, scale anchors, and item for the dimensions of entrepreneurial fear of failure	
Instructions	Please indicate the extent to which you agree or disagree with each statement.
Scale anchors	1 = "strongly disagree"; 2 = "disagree"; 3 = "neither agree nor disagree"; 4 = "agree"; 5 = "strongly agree."
	Note: When using this instrument, we recommend researchers consider using 7-point or 9-point scales to avoid issues of range restrictions. We also recommend researchers consider using "not at all afraid"/"very much afraid" type of anchor to avoid concerns associated with agreement-based question formats.
Stem	Over the past few months, I have been afraid...
Dimensions	Validated items
F	...of not getting enough funding to move the company forward
F	...of not being able to finance the business
F	...of not being able to get the required funding for the business
PI	...that no one will be interested in the product/service
PI	...that this is not a valuable business idea
PI	...that there is no need for our product/service out there
TSE	...of other people's expectations of me
TSE	...of disappointing the people who are important to me
TSE	...of losing the trust of people who are important to me
OC	...that running the business is taking my time away from other activities
OC	...of missing important events of my life because of my business
OC	...of not being able to spend enough time with my family and friends
PA	...of not being able to manage people effectively
PA	...of not being able to manage the business effectively
PA	...of not being able to fulfil all the roles that this job requires
FS	...of running out of money
FS	...of losing all my savings
FS	...of losing all I have invested in the business/business activities
Stem	Over the past few months, I have been afraid of the organization's ability to...
VE*	...meet client expectations
VE*	...overcome technical challenges
VE*	...deliver upon promises

Figure 13: Variables Fear of Failure

Source: (Cacciotti et al., 2020, p. 22)

The Cacciotti et al.'s (2020) model has been slightly adapted in some respects. Depending on the basic variables (self-employed, not self-employed with desire for self-employment, not self-employed without desire), the stem question was asked differently. The stem question should help to explain and describe the limited time perspective (Cacciotti et al.'s, 2020, p. 8). While the already self-employed participants were directly asked exactly about Cacciotti et al.'s (2020) stem, the stem for the non-self-employed participants was as follows:

*If I were to start my own business, I would be afraid....*

*and If I owned my own business, I would be afraid of the organization's ability to....*

The FOF dimensions were measured using a five-scale system. The paper with the original model had presented the five- and seven-scale format with a recommendation towards seven-scales (Cacciotti et al., 2020, p. 22). Nevertheless, the five scales were used in this study because the literature (Devlin et al., 2003) and feedback from pilot tests showed that the five-scale system was more concise. Due to the already high complexity of the questions, the seven-level scale system was rejected by the test participants due to the added confusion.



In the guidelines for using the measurement of entrepreneurial FOF, Cacciotti et al.'s (2020) also notes that there might be limitations regarding the "agree and disagree" response format (p. 22). For this reason, "not afraid / afraid" was applied.

In addition to Cacciotti et al.'s (2020) measure of entrepreneurial FOF, additional variables were included in the questionnaire, as this model would not have been sufficient to respond to the hypotheses when used alone. The following three dimensions were selected: success, motivation to self-employment, and association to failure. The five-scale format with "agree / disagree" was applied.

### **3.4 Sample Size and Data Collection**

For this study, the sample involved women in Austria and women in the US. The sampling method for this research was the random voluntary response method. This means that individuals were chosen randomly from the total population and invited to participate voluntarily (Stockemer, 2019, p. 58).

According to Fowler, a sample size between 150 and 200 participants has an appropriate precision (Fowler, 2014, p. 39). Another author states that at least 100 participants are needed to perform a regression analysis (Green, 1991). In general, the more participants one has in the sample, the more reliability and stability is obtained the results (Fowler, 2013). Given these findings, the author decided that the sample size of this work should be at least 200 participants per country.

In total, 671 people took part in the survey. Of these 671 people, 651 were women, 254 were women from Austria, and 397 women from the US.

The data collection period was from May 13, 2022 to May 25, 2022. To achieve the mentioned sample size, the author created a self-administered online survey. The survey was distributed with an introductory text including a data protection.

In Austria, the distribution was done via email through the distributor of the Vorarlberg University of Applied Sciences, the author's Instagram account, and Profilic, a service provider for collecting survey participants. All participants were also encouraged to share the survey in their circles. Participants from the US were recruited to participate in the research through the author's private network and Profilic.

### **3.5 Questionnaire Structure**

The survey was created using the Unipark tool. At the very beginning of the survey, participants choose between German and English, as an identical survey questionnaire was created in both languages. For this purpose, the questions were created with the help of back-translation (Saunders et al., 2009, p. 385). This means that the source questionnaire was in German and was translated into English by the compiler. The parts which have been already in English were translated into German. A native speaker then translated the target questionnaire back into German. The contents were then compared and finalized.

The questionnaire consisted of a total of 47 questions. The first six questions focused on demographics, including gender, country of residence, cultural background, age group, marital status, and educational qualification. The rest of the questionnaire consisted of three separate parts. The first part asked one question about the basic variable of self-employment. The second part asked about the following secondary variables: success, motivation for self-employment, and failure in general. The last part consisted of the variables and dimensions of Cacciotti et al.'s (2020) FOF model.

The survey was specifically addressed to women only. Nevertheless, other genders were also allowed in the survey questionnaire, and a gender question was included to ensure the gender differentiation.

One of the purposes of the pilot test was to determine whether the questions were biased. The questions were then adapted accordingly and ultimately did not contain any information about the study itself or any explanation or definition of the concept of FOF. This allowed the author to remove any potential bias in the questions.

### **3.6 Pilot Test**

The validation and testing of the questionnaire was done in two steps. In the first step, an expert's feedback from the field of quantitative research was consulted. Subsequently, a pilot test was created with 10 people from Austria and with one person from the US. The 10 persons were female and between 20 and 60 years old and therefore representative of the target population.

### **3.7 Reliability and Validity**

In his book, Saunders refers to reliability as the question of consistency of findings (Saunders et al., 2009, p. 156). Here, it is essential to avert the threat of errors, such as participant bias (Saunders et al., 2009, p. 156). As previously mentioned in section 3.5., certain topics and terms were deliberately eliminated from the questions in this questionnaire to avoid such biases.

The application of Cacciotti et al.'s (2015) existing model also contributes to the reliability of this study, as it is reasonable that the measure model will also produce similar results in future applications.

Validity refers to ensuring that the right variables are being tested. For this reason, a pilot test was carried out as described in section 3.6. Demographic questions such as gender and place of residence are designed to ensure that participants are really from Austria or the US and are women.

### **3.8 Data Analysis**

To analyze the data for this research, the author processed the data using the IBM Statistics SPSS software tool. The data were exported out of the Unipark tool after the survey was completed and imported into SPSS.

Prior to the data analysis, the author processed the data. Data processing includes checking errors, deleting incomplete entries, and checking the coding (Saunders et al., 2009, pp. 416–419).

Data from participants who were not of the female sex and who were not residents of Austria, or the United States were excluded from the analysis.

The sample and its frequencies were represented using diagrams. The collected data were then examined descriptively. The one-way ANOVA test is used as one of the data analysis methods because it is a numeric variable that is divided into more than three groups using a descriptive variable (Saunders et al., 2009, p. 458).

Since the ANOVA test provided a significant result, another test was conducted. This was the Games-Howell post-hoc test, which examines equal or unequal variances, is performed. The post-hoc test is used when there is a significant result, but the individual groups cannot be distinguished (Hemmerich, n.d.). If the ANOVA test resulted significantly, the Games-Howell post hoc test, which tests equal or unequal variances, was performed. The post hoc

test is used when there is a significant result, but the individual groups cannot be distinguished (Hemmerich, n.d.). To examine hypothesis with two comparing variables, a bivariate correlation was used. The correlation examines whether there is a relationship between the two variables (Saunders et al., 2009, p. 459).

## 4. Results

This chapter presents the results and analyses of the empirical research. The first section describes and visualizes the sample in detail. The following section then focuses on the hypothesis testing.

### 4.1 Sample Description

This section presents the sample (N=651), the demographic data, and characteristics of the sample population. Table 2 shows the general overview and frequencies of the sample. All participants of N=651 are female.

	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
<b>female</b>	651	1,00	1,00	1	,000	1	1
<b>country</b>	651	1,61	2,00	2	,488	1	2
<b>age</b>	651	4,29	4,00	3	1,434	1	7
<b>education</b>	651	4,66	5,00	5	,967	1	7
<b>employment</b>	651	2,06	2,00	2	,759	1	3

Table 2: Descriptive statistic of sample

Source: Own presentation

## Participants by country

A total of 651 female participants took part in the survey. Of these, 254 are from Austria,

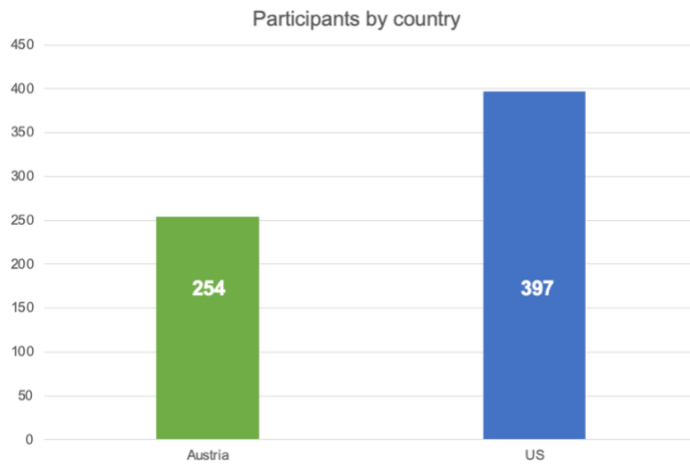


Figure 14: Participants by country

Source: Own presentation

## Age

Figures 15 and 16 list the age distribution of participants from Austria and the US.

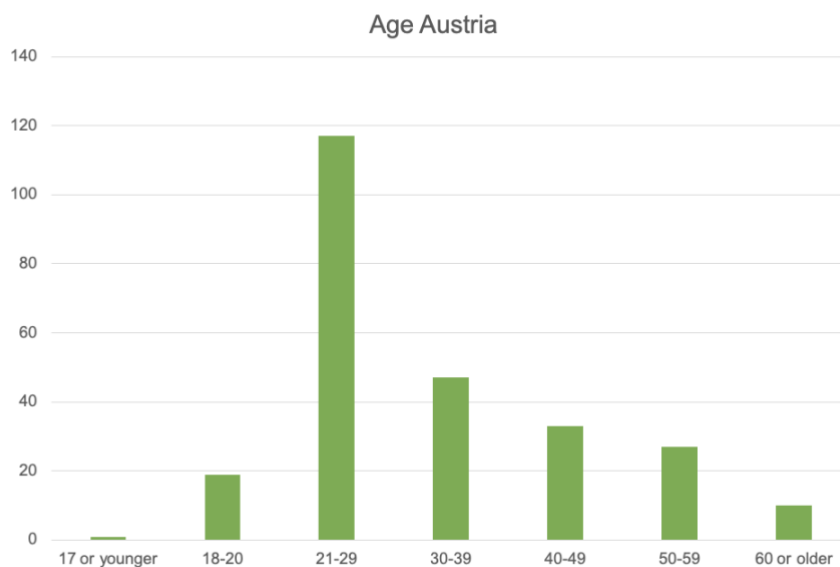


Figure 15: Age of participants in Austria

Source: Own presentation

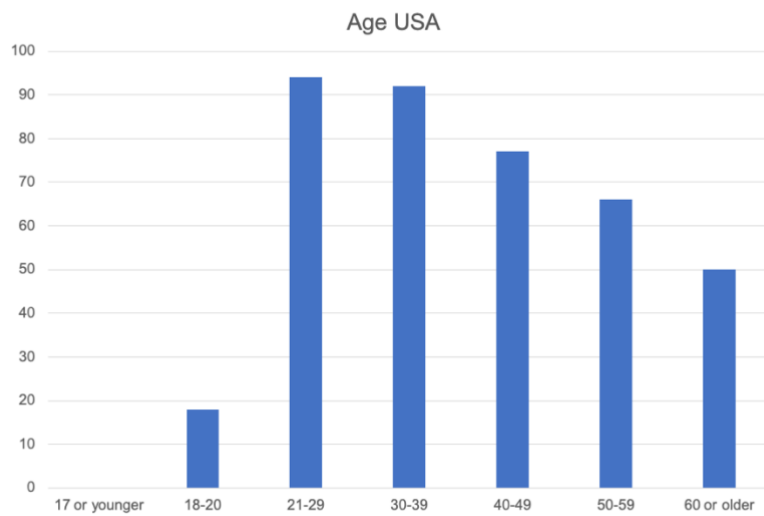


Figure 16: Age of participants in USA

Source: Own presentation

### Basic variables of self-employment per country

The following Figures 17 and 18 show the breakdown of the baseline variables (self-employed, not self-employed with desire for self-employment, and not self-employed without desire for self-employment).

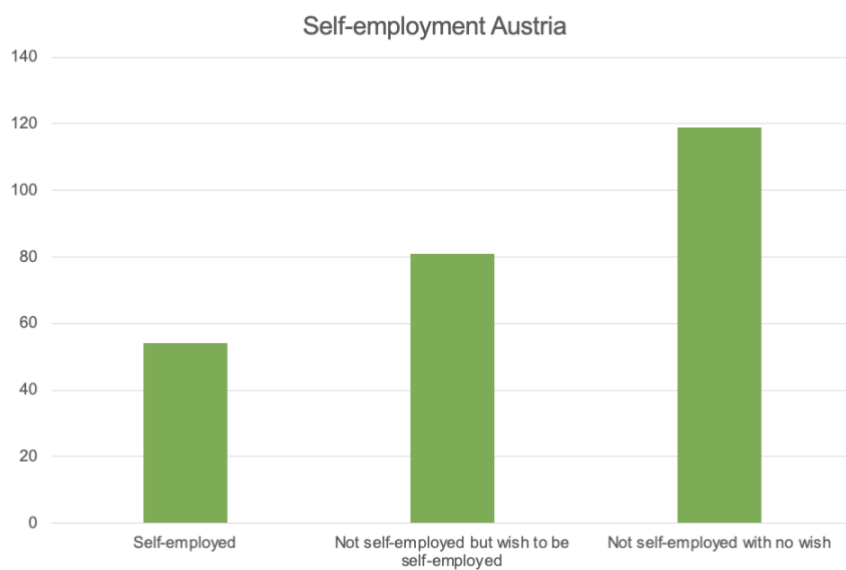


Figure 17: Self-employment Austria

Source: Own presentation

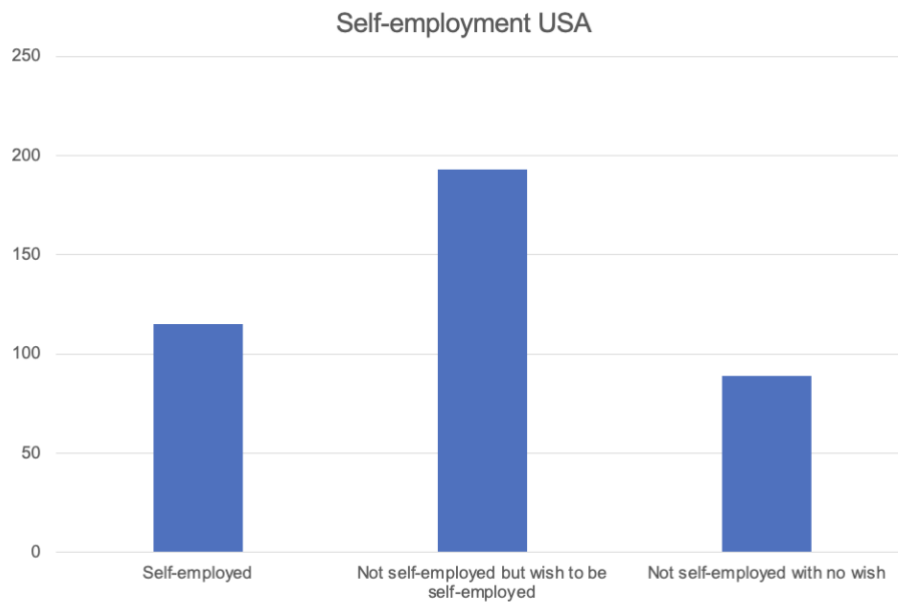


Figure 18: Self-employment US

Source: Own presentation

## 4.2 Descriptive Statistics

This chapter tests the hypotheses that have already been formulated. The hypotheses serve to answer the previously stated research questions:

### What are the effects of Fear of Failure on female entrepreneurial action in Austria?

- How do the fears of self-employed and non-self-employed women in Austria differ from those of women from the US and is failure associated positively?
- To what extent do the fears of already self-employed women in Austria differ from those of non-self-employed women?
- How distant are the fears of non-self-employed women with a desire for self-employment from women who are already self-employed?
- How successful feel women in Austria? Is there a distinction between self-employed and non-self-employed women?
- What recommendations for actions could support female Austrians to overcome their FOF?

To test the hypotheses, all data were first processed and cleaned in SPSS. The H0 hypotheses were then listed, and the procedure for testing was created. As an overview, the hypotheses are listed below in Table 3.

	<b>Table with Hypothesis</b>
1	<b>H1: US women are less afraid of failure than Austrian women.</b> <i>H0: US women are equally afraid of failure than Austrian women.</i>
2	<b>H1: Austrian women who are not self-employed have higher FOF than self-employed Austrian women.</b> <i>H0: Austrian women who are not self-employed have the same FOF than self-employed Austrian women.</i>
3	<b>H1: Austrian women with the wish for self-employment have higher FOF than self-employed Austrian women.</b> <i>H0: Austrian women with the wish for self-employment have the same FOF than self-employed Austrian women.</i>
4	<b>H1: There is a positive relationship between education level and self-employment rate.</b> <i>H0: There is no positive relationship between education level and self-employment rate.</i>
5	<b>H1: Younger women are less afraid of failure than older women, among all female participants.</b> <i>H0: Younger women are equally afraid of failure than older women, among all female participants.</i>
6	<b>H1: US women are less afraid of the dimension "ability to fund a venture" than Austrian women.</b> <i>H0: US women are equally afraid of the dimension "ability to fund a venture" than Austrian women.</i>
7	<b>H1: US women talk more about their failure than Austrian women.</b> <i>H0: US women talk the same about their failure than Austrian women.</i>
8	<b>H1: US women associate failure more positively than Austrian women.</b> <i>H0: US women associate failure equally positive than Austrian women.</i>
9	<b>H1: Austrian self-employed women feel more successful than not self-employed Austrian women.</b> <i>H0: Self-employed women in Austria feel equally successful than not self-employed women.</i>

Table 3: Table with Hypothesis

Source: Own presentation

The descriptive results related to the participants and their demographics are listed in Table 4. In particular, this table lists the descriptive statistics of Cacciotti's FOF dimensions (Cacciotti et al., 2020). Given that Cacciottis measures were created as unit weights (Cacciotti et al., 2020, p. 16), each dimension consists of three questions that can be evaluated collectively.



Statistics									
		Fear_of_Failu re	F	PI	TSE	OC	PA	FS	VE
N	Valid	651	651	651	651	651	651	651	651
	Missing	0	0	0	0	0	0	0	0
Mean		3.29251701	3.61187916	3.36456733	3.17460317	3.11111111	3.05734767	3.78084997	2.94726062
Median		3.38095238	4.00000000	3.66666667	3.33333333	3.00000000	3.33333333	4.00000000	3.00000000
Mode		3.00000000	4.00000000	4.00000000	4.00000000	4.00000000	4.00000000	4.00000000	2.00000000
Std. Deviation		.786910432	1.04623159	1.12738137	1.09796867	1.15386135	1.08861483	1.10543424	.966684662
Minimum		.285714286	.333333333	.000000000	.000000000	.000000000	.000000000	.000000000	1.00000000
Maximum		5.76190476	7.00000000	7.33333333	6.66666667	7.00000000	6.00000000	8.33333333	5.00000000

F= Ability to fund the venture; PI= Potential of the idea; TSE= Threat to social esteem; OC= Opportunity costs; PA= Personal Ability; FS= Financial Security; VE= Ventures capacity to execute

Table 4: Descriptive results Fear of Failure (FOF)

Source: SPSS

### 4.3 Testing of the Hypothesis

#### Hypothesis 1

*H1: US women are less afraid of failure than Austrian women*

*H0: US women are equally afraid of failure than Austrian women.*

This hypothesis was tested by using the one-way ANOVA test. The country variable was tested against the total FOF dimensions. As the results were not significant (see Table 5), the null hypothesis is not rejected.

ANOVA					
Fear_of_Failure					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,147	1	,147	,237	,626
Within Groups	402,351	649	,620		
Total	402,498	650			

Table 5: ANOVA Dimensions of Fear of Failure (FOF) between Austria and US

Source: SPSS

#### Hypothesis 2

*H1= Austrian women who are not self-employed have higher FOF than self-employed Austrian women.*

$H_0$  = Austrian women who are not self-employed have the same FOF than self-employed Austrian women.

This hypothesis was also tested by using the one-way ANOVA test. This ANOVA test compares all of Cacciotti's dimensions (Cacciotti et al., 2020) of Fear of Failure (FOF) with the employment variable (E). There are three variables in the consolidated variable E: self-employed, not self-employed, and not self-employed with wish for self-employment. As the results were significant (see Table 6), the null hypothesis is rejected.

ANOVA					
Fear_of_Failure					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27,433	2	13,716	24,356	<,001
Within Groups	141,352	251	,563		
Total	168,784	253			

Table 6: ANOVA test Fear of Failure (FOF) and Employment (E)

Source: SPSS

Since the ANOVA test provided a significant result, the post-hoc test was conducted. To test hypothesis 2, the author compares E3 and E1 in line 5 from Table 7. The mean difference (I-J) is positive, indicating that E3 has a higher Fear of Failure (FOF) than E1. As the result is highly significant ( $p < .001$ ), the null hypothesis  $H_0$  is therefore rejected and  $H_1$  is accepted.

Multiple Comparisons						
Dependent Variable: Fear_of_Failure						
Games-Howell						
(I) E	(J) E	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.8827160*	.134231935	<,001	-1.2022988	-.56313333
	3	-.7155825*	.133195907	<,001	-1.0326474	-.39851762
2	1	.88271605*	.134231935	<,001	.563133330	1.20229877
	3	.167133520	.101644197	,230	-.07298698	.407254021
3	1	.71558253*	.133195907	<,001	.398517616	1.03264744
	2	-.16713352	.101644197	,230	-.40725402	.072986981

\*. The mean difference is significant at the 0.05 level.

E1 = self-employed; E2 = not self-employed with wish for self-employment; E3 = not self-employed

Table 7: Post-hoc test Fear of Failure (FOF) and Employment (E)

Source: SPSS

### **Hypothesis 3**

*H1= Austrian women with the wish for self-employment have higher FOF than self-employed Austrian women.*

*H0= Austrian women with the wish for self-employment have the same FOF than self-employed Austrian women.*

This hypothesis was also tested by using the one-way ANOVA test. This ANOVA test compares all of Cacciotti's dimensions (Cacciotti et al., 2020) of FOF with the employment variable (E). As the results were significant (see table 6), the null hypothesis gets rejected.

Since the ANOVA test provided a significant result, the post-hoc test is again conducted. To test hypothesis 3, the author compares E2 and E1 in line 3 from Table 7. The mean difference (I-J) is positive, indicating that E2 has a higher FOF than E1. As the result is highly significant ( $p < .001$ ), the null hypothesis H0 is therefore rejected, and H1 is accepted.

For hypothesis 3 (4.2.3) and hypothesis 3 it must be mentioned that surprisingly there was no significant difference between E (not self-employed with wish to be self-employed) and E3 (not self-employed with no wish to be self-employed).

### **Hypothesis 4**

*H1= There is a positive relationship between education level and self-employment rate.*

*H0= There is no positive relationship between education level and self-employment rate.*

To examine hypothesis 4, the two variables of educational level and employment (E) were compared using a bivariate correlation. The Spearman ( $\beta = -0,005$ ,  $p = 0,903$ ) and Pearson ( $\beta = 0,003$ ,  $p = 0,945$ ) correlation coefficients were quite small and not significant (see Tables 8 and 9 ). H0 is therefore not rejected.

### Correlations

		education	E
Spearman's rho	education	Correlation Coefficient	1,000
		Sig. (2-tailed)	.
		N	651
	E	Correlation Coefficient	-,005
		Sig. (2-tailed)	,903
		N	651

Employment = E; education

Table 8: Correlation Education and Employment (E) Spearman

Source: SPSS

### Correlations

		E	education
E	Pearson Correlation	1	,003
	Sig. (2-tailed)		,945
	N	651	651
education	Pearson Correlation	,003	1
	Sig. (2-tailed)	,945	
	N	651	651

Employment = E; education

Table 9: Correlation Education and Employment (E) Pearson

Source: SPSS

## Hypothesis 5

*H1= Younger women are less afraid of failure than older women, among all female participants.*

*H0 = There is a positive relationship between education level and self-employment rate.*

This hypothesis was tested by using the one-way ANOVA test. In the data sources, age was categorized into seven different groups. Due to lack of data for age group 1 (17 or younger), this was combined with data group 2 (18-20). As the results were significant (see Table 10, the null hypothesis gets rejected.

## ANOVA

Fear\_of\_Failure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39,100	6	6,517	11,549	<,001
Within Groups	363,398	644	,564		
Total	402,498	650			

Table 10: ANOVA Fear of Failure (FOF) and Age

Source: SPSS

Since the ANOVA test provided a significant result, the author conducted the post-hoc test. Table 11 shows the post-hoc results for FOF and age. All values below 0.05 are significant, and only these values are listed below.

### Multiple Comparisons

Dependent Variable: Fear\_of\_Failure

Games-Howell

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2	3	.077581394	.122298444	,988	-.28439231	.439555102
	4	.332747336	.127995400	,113	-.04390640	.709401069
	5	.50410116*	.140687859	,007	.093520552	.914681772
	6	.53109925*	.134599582	,002	.136803204	.925395303
	7	.81975773*	.153797823	<,001	.371645445	1.26787001
3	2	-.07758139	.122298444	,988	-.43955510	.284392314
	4	.25516594*	.077782915	,015	.032010540	.478321344
	5	.42651977*	.097264758	<,001	.146350378	.706689157
	6	.45351786*	.088229287	<,001	.199241685	.707794033
	7	.74217633*	.115417200	<,001	.405678596	1.07867407
4	2	-.33274734	.127995400	,113	-.70940107	.043906397
	3	-.2551659*	.077782915	,015	-.47832134	-.03201054
	5	.171353826	.104337654	,572	-.12877239	.471480046
	6	.198351918	.095970412	,309	-.07782463	.474528465
	7	.48701039*	.121437403	,002	.134207582	.839813201
5	2	-.5041012*	.140687859	,007	-.91468177	-.09352055
	3	-.4265198*	.097264758	<,001	-.70668916	-.14635038
	4	-.17135383	.104337654	,572	-.47148005	.128772394
	6	.026998092	.112341316	1,000	-.29626181	.350257996
	7	.315656566	.134749005	,185	-.07409955	.705412680
6	2	-.5310993*	.134599582	,002	-.92539530	-.13680320
	3	-.4535179*	.088229287	<,001	-.70779403	-.19924169
	4	-.19835192	.095970412	,309	-.47452847	.077824630
	5	-.02699809	.112341316	1,000	-.35025800	.296261813
	7	.288658474	.128379391	,224	-.08347660	.660793550
7	2	-.8197577*	.153797823	<,001	-1.2678700	-.37164545
	3	-.7421763*	.115417200	<,001	-1.0786741	-.40567860
	4	-.4870104*	.121437403	,002	-.83981320	-.13420758
	5	-.31565657	.134749005	,185	-.70541268	.074099548
	6	-.28865847	.128379391	,224	-.66079355	.083476602

\*. The mean difference is significant at the 0.05 level.

2= 17 or younger and 18-20; 3= 21-29; 4= 30-39; 5= 40-49; 6= 50-59; 7= 60 or older

Table 11: Post-hoc test Fear of Failure (FOF) and Age

Source: SPSS

#### Comparison group 2 with 5,6 and 7

The mean difference (I-J) is positive. Age group 2 (17 or younger and 18-20) has a higher FOF than groups 5,6 and 7. However, age group 2 does not have a significantly higher FOF than groups 3 and 4.

#### Comparison group 3 with 4,5,6 and 7

The mean difference (I-J) is positive. Age group 3 (21-29) has a higher FOF than groups 4, 5, 6 and 7.

#### Comparison group 4 with 3 and 7

As stated above, the FOF of age group 3 was higher than that of group 4. The mean difference (I-J) is positive between age groups 4 and 7. Group 4 has a FOF than group 7. Lastly, there is no significant difference between group 4 and groups 5 and 6.

The comparison with the other groups has already covered in the comparisons above. It should be noted that the largest FOF was in age group 2 and the smallest was in group 7. In age groups that are close to one another, there are no significant differences. H1 from hypothesis 6 is thus rejected, since as the older age groups have less FOF than the younger ones.

### **Hypothesis 6**

*H1: US women are less afraid of the dimension "ability to fund the venture" than Austrian women.*

*H0: US women are equally afraid of the dimension "ability to fund the venture" than Austrian women.*

This hypothesis was tested by using the one-way ANOVA test. The country was tested against the ability to fund the venture FOF dimension (F). As the results were not significant (see Table 12), the null hypothesis is not rejected.

ANOVA					
F	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,038	1	,038	,034	,853
Within Groups	711,453	649	1,096		
Total	711,490	650			

Table 12: ANOVA Dimension Ability to fund the venture=F

Source: SPSS

## Hypothesis 7

*H1: US women talk more about their failure than Austrian women.*

*H0: US women talk the same about their failure than Austrian women.*

This hypothesis was tested by using the one-way ANOVA test. The country variable was tested against dimension V3 ("I often talk about my failures with people around me"). As the results were not significant (see Table 13). Therefore, the null hypothesis is not rejected.

ANOVA					
V3	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,049	1	,049	,036	,849
Within Groups	879,130	649	1,355		
Total	879,180	650			

country 1=Austria; country 2=US; V3= I often talk about my failures with people around me.

Table 13: ANOVA variable V3 between Austria and US

Source: SPSS

## Hypothesis 8

*H1: US women associate failure more positively than Austrian women.*

*H0: US women associate failure equally positive than Austrian women.*

This hypothesis was tested by using the one-way ANOVA test. This ANOVA test compares the country the variable with dimension V2 ("I associate failure with something positive."). As the results were significant (see Table 14), the null hypothesis gets rejected.

## ANOVA

V2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7,206	1	7,206	5,893	,015
Within Groups	793,590	649	1,223		
Total	800,796	650			

Table 14: ANOVA variable V2 between Austria and US

Source: SPSS

As a further test to check the hypothesis, the author ran a group statistic, and the mean is presented in Table 15 below. The mean for women from the US (country 2) is higher than for women from Austria (country 1). Therefore, H1 is accepted.

## Group Statistics

	country	N	Mean	Std. Deviation	Std. Error Mean
V2	1	254	2,49	1,162	,073
	2	397	2,71	1,068	,054

country 1=Austria; country 2=US; V2= I associate failure with something positive.

Table 15: Group statistics V2 between Austria and US

Source: SPSS

## Hypothesis 9

*H1: Austrian self-employed women feel more successful than not self-employed Austrian women.*

*H0: Austrian self-employed women feel equally successful than not self-employed women.*

This hypothesis was tested by using the one-way ANOVA test. This ANOVA test compares self-employment (E) with the variable S1 ("I am successful"). As the results were significant (see Table 16), the null hypothesis is rejected.



## ANOVA

S1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9,888	2	4,944	4,957	,008
Within Groups	250,332	251	,997		
Total	260,220	253			

S1 = I am successful.

Table 16: ANOVA variable S1 and Employment (E)

Source: SPSS

Since the ANOVA test provided a significant result, the author conducted the post-hoc test. To test hypothesis 9, the author compares E1 and E2 in line 1 from Table 17. The mean difference (I-J) is positive and significant, indicating that E1 feels more successful than E2.

In line 4, E2 and E3 are compared. The mean difference is negative and significant, indicating that E2 feels less successful than E3. As a result, the null hypothesis H0 is rejected, and H1 is accepted.

### Multiple Comparisons

Dependent Variable: S1

Games-Howell

(I) E	(J) E	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	,512*	,172	,010	,10	,92
	3	,160	,157	,567	-,21	,53
2	1	-,512*	,172	,010	-,92	-,10
	3	-,353*	,148	,047	-,70	,00
3	1	-,160	,157	,567	-,53	,21
	2	,353*	,148	,047	,00	,70

\*. The mean difference is significant at the 0.05 level.

E1 = self-employed; E2 = not self-employed with wish for self-employment; E3 = not self-employed

Table 17: Post-hoc test variable S1 and Employment (E)

Source: SPSS

In addition to variable S1, variable S2 ("I would like to be more successful") is also evaluated for additional testing of hypothesis 9. The ANOVA test compares self-employment (E) with the variable S2. As the results were significant (see Table 18), the null hypothesis is rejected.

## ANOVA

S2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20,919	2	10,459	8,768	<,001
Within Groups	299,416	251	1,193		
Total	320,335	253			

S2 = I would like to be more successful.

Table 18: ANOVA variable S2 and Employment (E)

Source: SPSS

Since the ANOVA test provided a significant result, the author conducted the post-hoc test. The mean difference (I-J) of E2 and E3 in lines 4 and 6 is positive and significant (see Table 19). This indicates that E2 would like to be more successful than E3. As a result, the null hypothesis H0 is rejected and H1 is accepted.

## Post Hoc Tests

### Multiple Comparisons

Dependent Variable: S2

Games-Howell

(I) E	(J) E	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-,488*	,190	,032	-,94	-,03
	3	,164	,200	,689	-,31	,64
2	1	,488*	,190	,032	,03	,94
	3	,652*	,141	<,001	,32	,99
3	1	-,164	,200	,689	-,64	,31
	2	-,652*	,141	<,001	-,99	-,32

\*. The mean difference is significant at the 0.05 level.

E1 = self-employed; E2 = not self-employed with wish for self-employment; E3 = not self-employed

Table 19: Post-hoc test variable S1 and Employment (E)

Source: SPSS

## **5. Discussion**

The aim of this study is to investigate the impact and effects of FOF on female entrepreneurial actions in Austria. This involves determining to what extent the FOF of women from Austria and the US differ from one another. Furthermore, this study analyzes whether already self-employed women have less fear of failure than non-self-employed women and what recommendations for actions can be provided to empower them. To some extent, the results are consistent with the previously established hypotheses. However, there were also surprising results that disproved some of the hypotheses.

This chapter discusses the limitations of the research as well as suggestions and proposals for future research. Additionally, this chapter summarizes the results of the data analysis and responds to the research question.

### **5.1 Limitations and Implications for Future Research**

This section highlights the limitations of this work. Furthermore, suggestions for future research are also provided to help overcome these limitations.

#### **Literature research and review**

At the beginning of the thesis, a literature review was conducted and based on this, the three topics entrepreneurship, female entrepreneurship and FOF have been addressed. This literature review might have been limited, however, as it can never be guaranteed that all existing literature sources on the respective topics have been identified. Moreover, it can never be completely determined which sources are genuinely valid. An attempt is made here to rely heavily on scholarly literature as a basis and only occasionally obtain additional information from web sources.

#### **Research design**

Survey questionnaires also cannot always capture everything that participants might feel and wish to express. For this reason, it may be recommended for further studies to include other research methods besides the collection of quantitative data with a web-based questionnaire. Data could be collected using the multiple method (Saunders et al., 2009, p. 151), meaning that qualitative data would be collected in addition to quantitative data.

#### **Sample**

This study's sample size cannot be used to generalize to the total population, even though sources generally say that this size is sufficient (Fowler, 2014, p. 39). The weighting

between Austria (254) and the US (397) can also be seen as a limitation of this work, as it could have been more evenly distributed to avoid underrepresentation on behalf of Austria. Furthermore, there may be limitations related to the sample size. It is suggested to obtain a larger sample size with a larger distribution among countries.

This thesis focuses on women from Austria and the US and has only collected and analyzed data from participants from these countries. For this reason, the generalizability of these results is limited to women from these countries and cannot be extrapolated to other countries.

Regarding language, the translation of the questions was carried out with back translation (Saunders et al., 2009, p. 385) by a native speaker. However, this may be a limitation because the back-translation was accomplished by only one person and therefore, the quality of translation may not be sufficient. To avoid this limitation, one should work with professional translators and then to revise the back translations.

The use of the same questionnaire for both countries may also be a limitation, as questions might be interpreted differently. For example, the demographic question about education level was challenging to create, as there are different educational levels and education opportunities in Austria and the US.

### **Questionnaire**

Another possible limitation is the design and layout of the questionnaire for usability purposes. The author recommends conducting a pilot test, as performed in this study.

Moreover, the choice of quantitative research with a questionnaire can also be seen as a potential limitation. Though emotions and opinions are involved in this study context (Debois, 2022), the questionnaire can only be used to a limited extent to inquire about them. Furthermore, not all questions may be answered as desired, as the question may be misunderstood (Prasanna, 2022). Again, a pre-test helps to clarify whether the questions are understood and whether the emotions can be represented with the answer options.

### **Evaluation**

There are also limitations regarding the evaluation of the data. The questionnaire of this empirical study asked the participants questions related to Cacciotti's FOF dimensions, in addition to three other dimensions. Since Cacciotti's dimensions had already been tested, no further validation tests were required here. The additional dimension on "success" should help to test the hypotheses in the context of FOS and how successful women feel. In preparation for the research, a hypothesis was created at the beginning according to the

FOS of US and Austrian women and the created questions for the survey were self-reported. However, a factor analysis would need to be done here to ensure that the research question was the correct one. Though a factor analysis would have gone beyond the scope of this master's thesis, this should be considered for future research.

Another limitation is that only the variables that directly evaluate the hypotheses have been considered. This means that there are still many variables that can be explored, which is a major opportunity for future research. Indeed, more exploratory work can be done with the data, and more significant results might emerge from the comparisons and investigations of other variables. Also, due to the scope of this work, the Test of Normality was not created. The Test of Normality tests the data of its normal distribution (Statistics.com, n.d.). This would be recommended for future research.

## 5.2 Summarized Results

This section summarizes and evaluates the results of the research. In total, there were 9 hypotheses that have been tested and analyzed. Each of the hypotheses is listed in the following table, illustrating which hypotheses were proven and which were rejected.

	Hypothesis	Finding
1	<b>H1: US women are less afraid of failure than Austrian women.</b> <i>H0: US women are equally afraid of failure than Austrian women.</i>	<b>REJECTED</b>
2	<b>H1: Austrian women who are not self-employed have higher FOF than self-employed Austrian women.</b> <i>H0: Austrian women who are not self-employed have the same FOF than self-employed Austrian women.</i>	<b>ACCEPTED</b>
3	<b>H1: Austrian women with the wish for self-employment have higher FOF than self-employed Austrian women.</b> <i>H0: Austrian women with the wish for self-employment have the same FOF than self-employed Austrian women.</i>	<b>ACCEPTED</b>
4	<b>H1: There is a positive relationship between education level and self-employment rate.</b> <i>H0: There is no positive relationship between education level and self-employment rate.</i>	<b>REJECTED</b>
5	<b>H1: Younger women are less afraid of failure than older women, among all female participants.</b> <i>H0: Younger women are equally afraid of failure than older women, among all female participants.</i>	<b>REJECTED</b>
6	<b>H1: US women are less afraid of the dimension "ability to fund a venture" than Austrian women.</b> <i>H0: US women are equally afraid of the dimension "ability to fund a venture" than Austrian women.</i>	<b>REJECTED</b>
7	<b>H1: US women talk more about their failure than Austrian women.</b> <i>H0: US women talk the same about their failure than Austrian women.</i>	<b>REJECTED</b>
8	<b>H1: US women associate failure more positively than Austrian women.</b> <i>H0: US women associate failure equally positive than Austrian women.</i>	<b>ACCEPTED</b>
9	<b>H1: Austrian self-employed women feel more successful than not self-employed Austrian women.</b> <i>H0: Self-employed women in Austria feel equally successful than not self-employed women.</i>	<b>ACCEPTED</b>

Table 20: Hypothesis acceptance overview

Source: Own illustration

### Difference in FOF Perception in Austria and US, and generally

Based on the data from the FEI 2015, there was an assumption that women in Austria differ slightly in their perception of FOF) (Terjesen & Lloyd, 2015; Figures 6 and 7). Given that the US is considered a pioneer of female entrepreneurship (Terjesen & Lloyd, 2015, p. 2) the author formed hypothesis 1. However, the surprising conclusion emerged that the H0 hypothesis cannot be rejected, as there is no significant difference between the FOF dimensions of women from Austria and the US. One reason for the lack of acceptance of this hypothesis might be an insufficient sample size, as listed in section 5.1. According to this study, the stagnating number of 17% of female founders in Austria (Leitner et al., 2022) cannot be explicitly attributed to FOF.

In further research, this study recommends examining what other pillars from the FEI 2015 play a significant role in the context of the Austria and US. As shown in Figure 5, the FEI 2015 index is based on the three pillars environment, ecosystem and aspiration (Terjesen & Lloyd, 2015). However, when examining the differences between the employment variables within the FOF dimensions, significant differences are again found. Hypotheses 2 and 3 could be confirmed, meaning that women who are not self-employed have a significantly higher FOF than women who are already self-employed. This evaluation implies that non-self-employed women are influenced by the FOF to their entrepreneurial action. However, this could apply to all women in general, since, as already mentioned above in this chapter, there is no country-specific determined difference.

In response to the research question (What are the effects of Fear of Failure on female entrepreneurial action in Austria), we can conclude that the dimensions of FOF have an impact on entrepreneurial action. Indeed, women who desire self-employment are more afraid of failure than those who are already self-employed. Given these findings, it is assumed that the FOF influences women with a desire for self-employment and perhaps even prevents them from becoming self-employed and founding a business.

The participants' association with failure is also highly revealing. The acceptance of hypothesis 8 clearly illustrates that there is a difference between Austria and US in this regard. It is significant that Austrian women associated failure less positively than US women. This finding supports the assumption, as mentioned in section 2.3.5, that the topic of failure is associated more negatively in Europe (Gratzer, 2001, pp. 18–19).

### Association with success

Another interesting result is the significant difference found related to hypothesis 9, where participants were asked about their feelings of being successful. As referenced in section 2.3.3 Albury (1982) developed a theory on FOS, who had written a study on the Fear of Success (FOS; p.17). The assumption that already self-employed women feel more successful than non-self-employed women is confirmed through the data analysis. The assumption that already self-employed women feel more successful than non-self-employed women could be confirmed with the data analysis. The same applies to the assumption that women who want to be self-employed would like to be more successful than women who do not want to be self-employed.

Nevertheless, when examining these variables, the author again notes that these variables have not yet been tested for their validity prior to this study and this is recommended in future research.

### Other findings

Other hypotheses, such as hypothesis 4, are not accepted in this thesis. This means that there is no significant relationship between the level of education and employment. Similarly, there is no evidence that US women talk more about their failures than Austrian women.

Hypothesis 5 is not accepted either. Here, however, the result is especially surprising. The Austrian Startup Monitors states for the startups that the new female founders are younger than their male counterparts (Leitner et al., 2022, p. 50). This data had led to the assumption and hypothesis that younger women are less afraid of failure than older women. Surprisingly, the older the women in the analysis were instead less afraid of failure.

### **5.3 Recommendations for Actions**

After answering the research questions, this work seeks to provide women from Austria with recommendations for actions. Based on the data collection, evaluation, and analysis, the following recommendations can be provided:

- To See Failure As An Opportunity
- To Encourage Young Women Into Entrepreneurship
- To Engage In More Exchange And Networking Among Women

#### **To See Failure As An Opportunity**

The finding that there was no significant difference between Austria and the US is highly surprising. Even though there was no difference with American women in terms of FOF, there was, however, a difference related to the association with failure. In America, the concept of "fuck-up nights" is highly widespread, while in Austria, such events only exist occasionally. Even though they also take place in Austria, there is less acceptance of seeing failure as an opportunity in Europe (Gratzer, 2001, pp. 18–19). Introducing a positive "failure culture" in Austria is one of the most important recommendations not only for women but also men in Austria. In American culture, as can be seen from the "fuck-up nights", trial and error culture (introduced by Edward Lee Thorndike) has been invented (Gautam, 2018). If Austria has a more positive failure culture, this can help motivate women who desire to be self-employed and number of women opening startups would likely increase.

#### **To Encourage Young Women Into Entrepreneurship**

Another key finding of this work is that younger women are far more afraid of failure than older women. The younger generation harnesses the potential for our economy and for our future. For this reason, it is essential to encourage and empower young women to ensure that they are less afraid of failure. Here, the first recommendation of seeing failure as an opportunity plays an essential role. If there is positive failure culture, a trial and error culture can also be introduced in Austria, which would certainly influence the general FOF of women and especially younger women. Another recommendation is to already start addressing the topics of entrepreneurship, success, failure, and risks in schools and educational institutions. To date, the curricula does not place much emphasis on business



and entrepreneurial mindsets (Der Standard, 2018) which represent an important aspect of this topic (see section 2.1.). If women were to learn these insights and skills at a young age, this could have a positive effect by increasing the number of startups in Austria. In other words, more women would be reluctant to start a business if they had a stronger entrepreneurial mindset at an earlier age.

### **To Engage in More Exchange and Networking Among Women**

There are already some very well-established networking groups (example), organizations and events for women in the field of entrepreneurship in Austria. Nevertheless, an even stronger orientation in this direction is recommended. Indeed, exchange is essential, especially regarding entrepreneurship and entrepreneurial mindset. Young women can be reached in schools and in their education institutes, but as mentioned above, the women who are already in the workforce need to be reached through organizations and networks.

More exchange and networking among women can also lead to a more positive perceptions of failure. Here, we return to the first recommendation, that failure should be seen as something positive, a topic which women should exchange about more, especially among themselves. While there is no scientific background yet to this idea, it can possibly be could be the basis for further research.

## 6. Conclusion

The aim of this research is to determine to what extent the FOF affects female entrepreneurial actions in Austria. This includes differences with the US, differences between self-employed women and non-self-employed women, and how successful women feel. Subsequently, recommendations for action for women from Austria are developed.

At the beginning of this thesis, a foundation has been laid by means of a literature review (chapter 2). This chapter has also established what entrepreneurship actually is (2.1) and described how the situation of female entrepreneurship looks like worldwide and how it looks like in Austria (2.2). Subsequently, the paper has more closely examined the theory and concept of FOF and women's FOF (2.3). Based on the theoretical findings, 9 hypotheses were formulated to help answer the research questions.

Using the theoretical foundation as a basis, the research design and research method are then elaborated in the methodology chapter (chapter 3). The research approach (3.2) included a cross-sectional study as an online survey to collect quantitative data. The research work of Gabriella Cacciotti has served as a basis for the FOF variables of the questionnaire. After preparing the questionnaire, the author translated it, tested it and finally sent it to the participants.

The analysis of the data (chapter 4) shows surprising and partly significant results related to the hypothesis testing.

Overall, this thesis adequately responded to the research questions. The effects of FOF on female entrepreneurial actions in Austria are certainly present to the extent that there are women with a desire for self-employment who have a higher FOF than women who are already self-employed. However, there is no difference between women in Austria and women from the US regarding general FOF. Only younger women have more fear of failure than older women. However, the women from Austria have a more negative association with failure than the American women. Non-self-employed women with a desire for self-employment also feel less successful than self-employed and non-self-employed women without a desire for self-employment. Based on all these findings, the author provides several recommendations for actions (5.3). Women in Austria should try to see the issue of failure in a more positive light and exchange more information among themselves. It is also essential that Austria starts to empower young women and girls more and alleviates their FOF to make entrepreneurship more feasible for them. The results are finally analyzed and interpreted after listing the limitations (5.1) of the work.

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## Appendix

### E-Mail Questionnaire German (Vorarlberg University of Applied Sciences)

Hallo liebe FH-Damen,

für meine Master-Thesis führe ich eine wissenschaftliche Untersuchung zum Thema **«Fear of Failure von Frauen im Kontext der Selbständigkeit»** durch. Ziel der Untersuchung ist der Vergleich zur **Fear of Failure von Frauen** aus Österreich und der USA.

Ich möchte alle **Damen** darum bitten, sich 7-10 Minuten Zeit zu nehmen und an meiner Studie teilzunehmen:

[HIER GEHT ES ZUR UMFRAGE](#)

Die Umfrage darf gerne an weitere weibliche Bekannte weitergeleitet werden.

Vielen Dank für eure Unterstützung und eure Zeit.

Wünsche allen ein schönes Wochenende.

Freundliche Grüße  
Caroline

### E-Mail Questionnaire English

Dear Ladies

for my master thesis I am conducting a scientific investigation on the topic "Fear of Failure of women in the context of self-employment". The aim of the study is to compare the Fear of Failure of women from Austria and the USA.

I would like to ask all ladies to take 7-10 minutes of your time and participate in my study:

[CLICK HERE FOR THE SURVEY](#)

Feel free to forward the survey to other female colleagues.


Thank you so much for your support and time.

Kind regards

## Online Questionnaire with Unipark

Wählen Sie bitte die bevorzugte Sprache:  
Please choose a language:

☐ Deutsch ☒ English

 8% NEXT

We appreciate your interest in participating in this scientific study.  
It takes about 7-10 minutes to answer the questions.

On the following pages, we would like to ask you a few questions on the topic of "Fear of Failure of Women in the context of self-employment".

- At the beginning of the survey, we would also like to ask you for more detailed information about yourself, so that we can include additional social factors (age, professional status) in the results and thereby improve the evaluation.
- You can participate in this survey without entering your name.
- Registration is not required for participation.

Even in the case of a survey, you have the right to information as well as deletion of your personal data in accordance with data protection. You can revoke this declaration of consent at any time. To do so, please contact [cho2322@students.fhv.at](mailto:cho2322@students.fhv.at). After revocation, your data will be deleted and kept inaccessible.

☐ I agree and would like to participate in the survey.

BACK  15% NEXT

Please indicate your gender.

☐ female ☐ male ☐ other

Where do you live?

☐ Austria ☐ USA ☐ Other

What is your cultural background?

☐ Austria

☐ USA

☐ deutschland

☐ Other

BACK

23%

NEXT

What age group are you in?

☐ 17 or younger ☐ 18-20 ☐ 21-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60 or older

What is your marital status?

☐ Married ☐ Divorced ☐ Single ☐ Widowed ☐ In a relationship

What is your highest degree of education?

☐ No degree ☐ GED ☐ Vocational school ☐ High school diploma or equivalent ☐ Bachelor's degree or equivalent  
☐ Master's degree or equivalent ☐ PhD Degree

BACK

31%

NEXT

Below you will find a statement that describes your current status in relation to SELF-EMPLOYMENT. Please indicate which of the statements applies to you.

☐ I am self-employed. ☐ I am not self-employed, but I wish to be self-employed.

☐ I am not self-employed and have no wish to be so.

BACK

38%

NEXT

Various statements are listed below.  
Please indicate how these statements apply to you.

I am successful.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
I would like to be more successful.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
To me, success means being financially independent.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
To me, success means moving up the career ladder.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
For me, success means running my own business.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
For me, success means having a family.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
For me, success means having a high level of education.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree

Success scares me.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
The expectations for successful people are higher than for less successful people.	<input type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree

BACK

46%

NEXT

Various statements are listed below.  
Please indicate how these statements apply to you.

What motivates me about entrepreneurship is that I can be my own boss.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
What motivates me about entrepreneurship is that I can manage my own time.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
What motivates me about entrepreneurship is that I can fulfill myself and implement new ideas.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
What motivates me about self-employment is that I can achieve a high income.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree

BACK

54%

NEXT

Various statements are listed below.  
Please indicate how these statements apply to you.

I have failed many times in my life.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
I associate failure with something positive.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
I often talk about my failures with people around me.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
I would like to talk about my failures more often.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
I often think about my failures.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree
I am afraid of failing.	<input checked="" type="radio"/> strongly disagree	<input type="radio"/> disagree	<input type="radio"/> neither agree nor disagree	<input type="radio"/> agree	<input type="radio"/> strongly agree

BACK

62%

NEXT

Over the past few months,  
I have been afraid...

?

...of not getting enough funding to move the company forward.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to finance the business.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to get the required funding for the business.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...that no one will be interested in the product/service.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...that this is not a valuable business idea.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...that there is no need for our product/service out there.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of other people's expectations of me.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid

...of disappointing the people who are important to me.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of losing the trust of people who are important to me.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...that running the business is taking my time away from other activities.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of missing important events of my life because of my business.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to spend enough time with my family and friends.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to manage people effectively.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to manage the business effectively.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to fulfil all the roles that this job requires.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	neither <input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid

...of disappointing the people who are important to me.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of losing the trust of people who are important to me.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...that running the business is taking my time away from other activities.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of missing important events of my life because of my business.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to spend enough time with my family and friends.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to manage people effectively.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to manage the business effectively.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of not being able to fulfil all the roles that this job requires.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid

...of running out of money.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of losing all my savings.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of losing all I have invested in the business activities.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid

BACK

69%

NEXT

...of running out of money.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of losing all my savings.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...of losing all I have invested in the business activities.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid

BACK

74%

NEXT



## If I were to start my own business, I would be afraid...

?

...of not getting enough funding to move the company forward.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...of not being able to finance the business.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...of not being able to get the required funding for the business.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...that no one will be interested in the product/service.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...that this is not a valuable business idea..

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...that there is no need for our product/service out there.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...of other people's expectations of me.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

## Over the past few months,I have been afraid of the organization's ability to...

?

...meet client expectations.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...overcome technical challenges.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

...deliver upon promises.

☐ not at all  
afraid

☐ not afraid

neither  
☐ afraid or  
not afraid

☐ afraid

☐ very much  
afraid

BACK

77%

NEXT

NEXT

If I owned my own business,  
I would be afraid of the organizations ability to...

?

...meet client expectations.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...overcome technical challenges.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid
...deliver upon promises.	<input type="radio"/> not at all afraid	<input type="radio"/> not afraid	<input type="radio"/> neither afraid or not afraid	<input type="radio"/> afraid	<input type="radio"/> very much afraid

BACK

87%

NEXT

Dear participant,

Thank you very much for your participation! You are helping us discover more about Fear of Failure.

You have now reached the end of the questionnaire.

Here is your confirmation code: 83C4F2DD

If you have any further questions about the content, purpose, or research ethics of this survey, please contact us at [cho2322@students.fhv.at](mailto:cho2322@students.fhv.at). If you are interested in the results of the survey, please contact [cho2322@students.fhv](mailto:cho2322@students.fhv).

Thank you again very much for your time and effort!

100%