



# SCHOOL OF ECONOMICS AND MANAGEMENT

From the Field to the Firm:  
The impact of an individual- and team sports  
background on decision-making in new  
ventures

by

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## **Abstract**

Sports have been shown to influence and shape humans in many ways. However, how sports background influences decision-making in early stage entrepreneurial ventures has not been examined closely. Hence, this thesis addressed this gap and explored how sports backgrounds influence decision-making in early-stage ventures. More specifically, it delved into how experience as an elite team sports athlete versus as an elite individual sports athlete shapes entrepreneurial decisions. This research employed a qualitative methodology, utilizing semi-structured interviews to gather insights from eight athlete-turned-entrepreneurs: four with a background in team sports and four with a background in individual sports. The findings were derived from initial highlighted quotes, which were then grouped into 1st-order themes, subsequently into 2nd-order themes, and ultimately into aggregate dimensions. The aggregate dimensions help to explain how the different sports backgrounds influence decision-making in ventures. The three dimensions: risk perception, external input and adaptability varied between the two groups of entrepreneurs. Team sports athletes were found to be more risk averse due to their higher feeling of responsibility for others and their lower perceived control over the outcomes of their decisions compared to the individual athletes. Furthermore, individual sports athletes tended to make decisions independently while team sport athletes opted for more collaborative decision-making. Finally, individual athletes displayed an inclination towards effectuation as a decision-making process whereas team sports athletes opted for causation.

**Keywords:** Decision-Making; Elite Athlete; Early-Stage Venture; Team Sport; Individual Sport; Sport Experience; Risk Perception; External Input; Adaptability.

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# Table of contents

<b>1. Introduction</b> .....	<b>4</b>
<b>2. Literature review</b> .....	<b>8</b>
2.1 Early stage decision-making .....	8
2.2 Factors shaping decision-making processes .....	8
2.3 Decision-making as an elite athlete .....	10
<b>3. Methodology</b> .....	<b>12</b>
3.1 Epistemology and ontology .....	12
3.2 Research design .....	12
3.3 Case selection.....	13
3.4 Data collection .....	15
3.5 Data analysis .....	17
3.6 Limitations .....	18
3.7 Ethical considerations .....	20
<b>4. Findings and Analysis</b> .....	<b>21</b>
4.1 Risk perception .....	21
4.1.1 Consequences of decisions .....	22
4.1.2 Perceived control .....	23
4.2 External input.....	25
4.2.1 Autonomy .....	27
4.2.2 Information seeking behavior .....	29
4.3 Adaptability.....	30
4.3.1 Resilience.....	32
4.3.2 Resourcefulness .....	34
4.4 Outliers.....	35
<b>5. Discussion and implications</b> .....	<b>37</b>
5.1 Main research findings.....	37
5.2 Practical implications.....	38
5.3 Theoretical implications.....	38
5.4 Recommendations for future research .....	39
<b>Reference list</b> .....	<b>41</b>
<b>Appendix A: Interview Guide</b> .....	<b>50</b>
<b>Appendix B: Consent form</b> .....	<b>53</b>

# 1. Introduction

The field of sports is frequently seen as interconnected with entrepreneurship, and recently many studies have focused on exploring this connection (Boyd et al. 2021; Steinbrink et al. 2020; Haski et al. 2024). The focus of these studies varies from exploring the development of certain traits during sports, to researching the transferability and the applicability of skills from sports to entrepreneurial environments. Significant differences have been found in skills, traits and thinking processes when comparing athletes to non-athletes, but also when comparing different subgroups within sports, such as elite athletes vs non-elite athletes, self-paced vs externally-paced sports athletes, and team sport athletes vs individual sport athletes (Jacobson & Matthaeus, 2014; Vaughan et al. 2019; Laborde et al. 2016). The effect of a sports background on situations outside the sporting context has been explored as well (Williams et al. 2011; Jacobson & Matthaeus, 2014). These studies find that the experiences and skills that are developed during sports are, to some degree, transferable to situations outside sports and that it therefore also impacts certain decision-making processes in ‘the real world’.

The research field of entrepreneurship can be regarded as adolescent, first gaining recognition as an independent field of academic study during the 1940s and 1950s (Jones & Wadhvani, 2006). Looking at research that connects sports with entrepreneurship it becomes clear that this domain is more juvenile, only gaining traction in recent years. However, as research in this area has grown, it has unveiled important insights into the transition of athletes from sports careers to entrepreneurship, suggesting that youth athletes are more inclined to pursue an entrepreneurial career than their non-athlete classmates (Kenny, 2015; Pervun et al. 2024). The importance of entrepreneurship for societal development (Zahra & Wright, 2016) combined with the fact that athletes possess personality traits that are crucial for entrepreneurship (Steca et al. 2018; Leutner et al. 2014) has been motivating further research within this topic.

A more specific field within both entrepreneurship and sports that has received a lot of attention in research is decision-making (Baker et al. 2003; Vaughan et al. 2019; Laborde et al. 2013). On the one hand, decision-making in sport is often defined as “the ability to assess important information from the environment, interpret this information accurately, and select the optimum response after having generated a set of options” (Baker et al. 2003). On the other hand, in entrepreneurial settings decision-making is defined as "the choices made by entrepreneurs when faced with entrepreneurial opportunities. It has the attributes of conventional decision-making, such as risk, process, and irreversibility” (Miao & Liu, 2010).

A clear overlap in the two definitions can be spotted. Both sports and entrepreneurship decision-making involve assessing and interpreting information, generating options, and making choices. To better illustrate the overlap of the fields, two examples are provided below. An example of a situation that requires decision-making in sports can be seen in football when a high pass goes over the defense and lands between the goalkeeper and the opposing team's striker. The goalkeeper faces two options: 1) go after the ball, risking arriving later than the striker, or 2) stay in place and guard the goal, which might give the attacker an easy shot at scoring. Similar situations are seen in entrepreneurial contexts on a daily basis, especially in the early stages. For example, when a startup founder has received an investment offer. The founder can 1) accept the investment, which brings in necessary funds, but dilutes ownership and potentially loses some control over the company, or 2) decline and maintain control but face financial constraints that could slow growth. The decision that will be made in both situations is dependent on several environmental factors and furthermore depends on the person making the decision. In situation one the goalkeeper has to consider the distance to the ball, the pace of the ball, and the pace of the opponent, and in situation two the founder has to consider the power of the investor, the expertise of the investor, and the amount of equity that has to be given up. In both situations the options need to be analyzed and the information needs to be interpreted correctly in order to select the right response.

Despite the recent interest in the intersection between sports and entrepreneurship, considerable limitations and challenges exist within this field of research. Currently, there is a lack of research focusing on how sport experience influences the decision-making process in entrepreneurship. This gap can largely be attributed to the research methods that have been used. Quantitative methods represent the predominant choice of approach for research within this area. More specifically, various studies use surveys to enable further statistical analysis in order to explore the relationship between sports and entrepreneurship (Steinbrink et al. 2020; Steca et al. 2018; Nia & Besharat, 2010; Haski et al. 2024). By using this method researchers are able to identify patterns and correlations between sport experience and entrepreneurial aspects. However, the studies fall short in understanding and explaining how the correlation between the fields actually influences the entrepreneurs. By utilizing qualitative research methods this area can become more comprehensive and more nuances can be captured. Moreover, exploring entrepreneurs' own perspectives on their decision-making processes in the early stage of their ventures and researching how these decisions are influenced by their sports background offers a unique approach that could deepen the understanding of this field of study.

The lack of depth in current studies has led to overlooking the impact of the type of sport practiced (team or individual), and on the level on which the sport was practiced (amateur or professional). Nevertheless, there are some findings within this area worth building upon. A study carried out by Nia and Besharat (2010) reveals that individual sport athletes display higher levels of conscientiousness and autonomy, whereas team sport athletes demonstrate notably greater agreeableness and sociability. Another research conducted by Steca et al. (2018) examined various groups of athletes in relation to the Big Five personality theory. The research shows that the sports background of successful athletes results in increased scores on extraversion, agreeableness, conscientiousness and neuroticism. Additionally, the study shows that individual sport athletes are more energetic and open in comparison to team sport athletes. Other similar studies also use qualitative methods to link sports to entrepreneurship and psychological traits (Steinbrink et al. 2020; Haski et al. 2024). However, these studies fail to consider the potential influence that team- or individual sports may have on individuals pursuing entrepreneurship. Hence, further research to understand this relationship more in-depth is needed.

This thesis builds upon current research which implies that athletes have certain traits suited for entrepreneurship, research that proves the influence of previous sports experience on decision-making, and research that shows the differences between team sport athletes and individual sport athletes. To do so, eight semi-structured interviews were conducted. This research method goes beyond the numeric values found in previous studies. Furthermore, the study builds upon research that suggests that individual- and team sports lead to different personality traits by researching how this difference influences decision-making in early-stage ventures. The authors aim to identify how a sports background of individual sports versus a background in team sports affects the decision-making of entrepreneurs in the early stage of their ventures. To do so, the following research question is formulated:

*How do individual and team sport experiences shape decision-making processes in the early stages of venture creation?*

To contribute, the thesis takes a qualitative approach to thoroughly understand the influence of diverse sports backgrounds on entrepreneurs. By identifying how a background as an elite individual sport athlete versus as an elite team sport athlete affects decision-making in the early stages of their ventures this thesis broadens current knowledge within the academic intersection of entrepreneurship and sports. An elite athlete can be defined as an individual who has reached

the highest level of performance in their sport and competes on a national or international level in his or her own age category (Swann et al. 2015).

The findings of this study could serve as a foundation for future research, in which more specific topics such as risk-taking, adaptability and competitiveness can be studied in more depth. Secondly, through examining athletes who transitioned into entrepreneurship from both individual- and team sports, the authors seek to discover whether there are differences in their decision-making approaches, which goes beyond previous research that focuses solely on the differences in personality characteristics between the groups (Steinbrink et al. 2020; Haski et al. 2024; Nia & Besharat, 2010). Further, the study offers valuable insights for elite athlete-turned-entrepreneurs themselves, by making them aware of the way they make decisions and why they do this, which allows them to reflect on their practices. Finally, the results of this thesis could provide additional insights on how to assist athletes transitioning into entrepreneurship. It could help to create tailored educational programs and support initiatives to address the specific needs and decision-making preferences of athletes from individual and team sports backgrounds, which can enhance their chances of success in entrepreneurship.



## **2. Literature review**

### **2.1 Early-stage decision-making**

Decision-making plays a pivotal role throughout the entire entrepreneurial journey. Over the lifespan of a business, daily decisions are required across multiple facets of the enterprise. Yet, decision-making is particularly important in the initial phases of a venture where many critical choices are made. To identify key decision events in the early stage of a venture the iterative procedure developed by Van de Ven and Poole (1990) and Poole et al. (2000) was used. This procedure uses information from the interviews to name those key events. Examples of the decision events that were identified are: hiring a new employee, negotiating with a potential customer, the distribution of tasks and deciding about new facilities. Choices made in these domains can significantly influence the company's long-term direction, potentially restricting or enabling future strategic opportunities (Boeker, 1988). Such choices could also affect the company's overall performance and its eventual success (Vohora et al. 2004).

These early decisions carry substantial weight for the company, yet making them is notably challenging. The challenge in these crucial decision-making processes stems from the uncertainty inherent in the early phases of a venture, particularly in rapidly changing markets (El-Awad, 2023). For example, the artificial intelligence market, where last year's technology has been significantly outpaced by the advancements of today's technologies. This uncertainty makes it difficult for the entrepreneur to manage the venture and make decisions on aspects such as acquiring and coordinating resources, assigning people to different tasks, and determining the allocation of the remaining profits from an opportunity (Reymen et al. 2015).

Jiang and Tornikoski (2019) explored the impact of various types of uncertainty on the decision-making strategies of entrepreneurs, specifically whether they adopt causal or effectual approaches as outlined by Sarasvathy (2001). The research indicates that the type of uncertainty perceived by entrepreneurs influences their choice of behavioral logic in resource management to meet the objectives of their ventures.

### **2.2 Factors shaping decision-making processes**

Besides the above-mentioned influencing factors there are several other factors that shape decision-making processes.

Firstly, Siegrist et al. (2005) conducted research suggesting that an individual's perception of risk plays a significant role in shaping their decisions and subsequent behavior. Risk perception can be described as an individual's assessment of the risk present in a situation,

influenced by factors such as how the situation is labeled, assessments of the controllability, and the individual's confidence in these assessments (Baird & Thomas 1985; Pablo et al. 1996). Building upon this definition, Simon et al. (2000) emphasized the role of perceived control in shaping risk perception and, consequently, decision-making processes. They argue that the individual's perception of control over a situation can influence how they perceive the associated risks, thereby impacting their decision-making behavior. Furthermore, Reynolds et al. (2009) contribute to this by highlighting the social dimension of decision-making in relation to risk. Their research suggests that individuals exhibit different risk-taking behavior depending on whether the decisions primarily affect themselves or others. They found that individuals tend to be less risk-averse when making personal decisions but become more risk-averse when their choices have implications for others.

Second, Schiebener and Brand (2015) state that decision-making processes are modulated by external influences. Individuals frequently make decisions after seeking input from others (Bonaccio & Dalal, 2006). However, the extent to which individuals are open towards external input and their inclination towards autonomous decision-making can vary (Gelderens, 2016). "Entrepreneurial autonomy is defined as a business owner/founder having decision rights regarding what work is done, when it is done, and how it is done" (Gelderens, 2016, p.542). Wageman (1995) suggests that as individuals become more accustomed to interdependence, they do not only develop a greater acceptance for it, but also develop a preference for it over time, thus lowering the urge for autonomous decision-making. Furthermore, individuals can differ in the sources they gather information from in order to make the right decisions (Mishra et al. 2015). This information-seeking behavior is a crucial form of purposeful behavior in both social and business contexts (Guo, 2011), and can be defined as the "purposive acquisition of information from selected information carriers (e.g., messages, sources and channels)" (Johnson et al. 1995, p. 275). According to Guo (2011), individuals shape their perception of information accessibility and quality of information sources based on their past experiences with using these sources. These perceptions subsequently influence their future behavior and their tendency to seek for external information (Guo, 2011).

Finally, according to research by Wang et al. (2020), adaptability influences decision-making, due to its ability to influence the effect of a decision. In this thesis adaptability encompasses cognitive adaptability, referring to the capacity of both individuals and teams to flexibly adjust their decision-making strategies in response to environmental changes, ensuring appropriateness and effectiveness (Haynie et al. 2016). Resilience is closely tied to adaptability, reflecting a mindset characterized by flexibility and the ability to transform in response to new

circumstances (Lai et al. 2016). It can be defined as the ability to react and adapt positively to a negative experience (Xing & Sun, 2013). Within entrepreneurship, resilience is often seen as an organizational capability. However, recent research suggests that it originates from the entrepreneurial mindset, or behavior of the founders and employees (Jaskiewicz et al. 2015; Reinmoeller & Van Baardwijk, 2005). Entrepreneur's resilience enables them to adapt to the environment in order to make the right decisions and overcome the challenges (Delladio et al. 2023). Another aspect of adaptability is the approach of the entrepreneur towards their resources. Resourcefulness within the field of entrepreneurship can be defined as "a boundary-breaking behavior of creatively bringing resources to bear and deploying them to generate and capture new or unexpected sources of value in the process of entrepreneurship" (Williams et al. 2021, p.2). The use of resources can be explained with the help of two decision-making logics, being causation and effectuation (Michaelis et al. 2020). Causation is characterized by a goal-oriented process, where entrepreneurs begin with a clear objective and make strategies to achieve this predetermined goal by using the available means. Effectuation, on the other hand, is a more open-ended decision-making model. Here, the entrepreneur has a set of given means and imagined ends and explores various possible outcomes that can be achieved with these resources (Sarasvathy 2001; Sarasvathy & Dew 2005). The different decision-making logics can be explained by moderating factors, including principles such as the "bird in the hand principle," which embodies the concept of effectuation and stands for the utilization of resources at hand (Hensel & Visser, 2020). Sarasvathy (2001) suggests that both decision-making logics can occur simultaneously, can intersect and can be interconnected across different contexts of decisions and actions. It is the specific context that plays a central role in the perception of what is effective in certain situations. Research has shown that increased environmental uncertainty leads to effectuation, whereas reduced environmental uncertainty and increased stakeholder pressure leads to causation (Reymen et al. 2015). However, individuals generally favor one approach over the other. This preference is influenced by factors that extend beyond the specific context (Gabrielsson & Politis, 2011).

### **2.3 Decision-making as an elite athlete**

Swann et al. (2015) performed a literature review on the definition of an elite athlete and concluded that this definition varies among different studies. Whereas some studies distinguish based on professionalism, other studies did this based on performance, and a third group of studies based it on international versus national versus regional competitiveness. This thesis

focuses on the last definition, as this theme was found in the majority of the studies. Therefore, the authors define an elite athlete as a person who has reached the highest level of performance in their sport and competes on a national or international level in his or her own age category.

Athletes display significant differences in their decision-making ability in sports environments, which frequently involve high pressure and stress. This difference is positively linked to the expertise of the athlete in the sport (Vaughan et al. 2019). Studies done by Vaughan et al. (2019) and by Raab and Laborde (2011) show that previous experience within an athletic career plays a significant role in the decision-making competencies for athletes within their sports. Decision-making experts rely on their mental capabilities and characteristics of the decision environment (Todd & Gigerenzer, 2012). The group of experts in sports, called elite athletes, tends to be better and faster at generating options than lower-level athletes (Glöckner et al. 2012; Vaughan et al. 2019) by making use of their intuition, which ultimately leads to making better and faster decisions (Raab & Laborde, 2011). Furthermore, research suggests that elite athletes have both quicker sensory processing and faster cognitive processing compared to non-athletes (Voss et al. 2010; Mori et al. 2002). This leads to more efficient information processing and as a result to better decision-making strategies (Macquet & Fleurance, 2007; Hanoch et al. 2006). This does not only apply in a sports environment, but also in an environment outside sports (Jacobson & Matthaeus, 2014). Studies have shown that elite athletes are better in predicting the outcome of certain actions compared to non-athletes, demonstrating transferability of decision-making skills (Travassos et al. 2013; Williams et al. 2011). Taatgen (2013) suggests that this could be due to the frequent engagement in complex cognitive processes, which increase proficiency in decision-making.

However, athletes differ widely among each other. Especially when you compare athletes of different kinds of sports, like individual- vs team sports, significant differences in personality characteristics are found (Laborde et al. 2016; Nia & Besharat, 2010). The findings of the studies that research this difference show that athletes in individual sports score higher in conscientiousness and autonomy compared to team sports athletes. Conversely, athletes participating in team sports outscore individual athletes in terms of agreeableness and sociotropy. Yet the effect of the differences found in these two groups on decision-making in the early stages of a venture has not been explored yet.

### **3. Methodology**

#### **3.1 Epistemology and ontology**

Research is biased by the author's perception of reality since it influences the selection of methods (Bell et al. 2022). The concept of ontology raises the question of what exists and how the nature of reality is theorized. Consequently, the ontological position affects the choice of what research design that most appropriately are able to capture the reality of a topic trying to be studied (Bell et al. 2022; Ackroyd & Fleetwood, 2000). This thesis aligns with the ontological positioning of constructionism which suggests that the knowledge of the world is constructed by the things we experience and how we understand them (Bell et al. 2022). Further, the aim of this thesis, to understand “how” sport experiences influence decision-making, was researched by focusing on how individuals interpret and make sense of their own experiences. To facilitate this understanding the thesis used a qualitative methodological approach due to its suitability for studying phenomenon in-depth (Bell et al. 2022).

Epistemology is different from ontology, but builds upon it by addressing how knowledge of reality can be acquired. The thesis adapted interpretivism as the epistemological standpoint, which mainly aims to understand human behavior (Bell et al. 2022). Alharahsheh and Pius (2020) explain that interpretivism is developed out of critique for a positivistic approach and views human beings as different from physical phenomena. Having an interpretive research paradigm emphasizes the view of social actors and suggests that knowledge is derived from individuals' own experience (Bell et al. 2022). Rather than trying to define universal laws, interpretivism prioritizes richness in findings and can also enable deeper understanding within an area of research (Alharahsheh & Pius, 2020). This further motivated this thesis' epistemological standpoint.

#### **3.2 Research design**

Lack of current theoretical knowledge within a field of research motivated the selection of an inductive approach (Bell et al. 2022). Previous research found that elite athletes excel in both generating options and making decisions rapidly and effectively due to their intuitive abilities (Glöckner et al. 2012; Raab & Laborde, 2011) and demonstrate superior sensory and cognitive processing speeds compared to non-athletes (Voss et al. 2010; Mori et al. 2002), which also extends beyond the sports domain, enhancing their decision-making capabilities in various environments (Jacobson & Matthaeus, 2014; Travassos et al. 2013; Williams et al. 2011; Taatgen, 2013). However, research has not investigated how sports experience influences

decision-making for entrepreneurs, and therefore there is a shortage of theoretical knowledge in the field. This research aimed to create a deeper understanding and contributed to filling this research gap through an inductive approach. The process of inductive studies usually involves observations or recognition of themes or patterns that ultimately help to form a general conclusion (Bell et al. 2022).

This thesis opted for a case study design due to its ability to provide in-depth information on an object (Bell et al. 2022). With this design the thesis aimed to contribute to the existing research field with new insights (Eisenhardt, 1989). The cases selected for this study are vested in entrepreneurs with prior elite athlete experience, aimed to understand how team- and individual sport experiences influences decision-making in early-stage ventures. As previously mentioned, the definition of decision-making that was used in this thesis aligns with the definitions of both Baker et al. (2003) and Miao and Liu (2010). It is a process that involves the assessment and interpretation of information, generation of options, and selection of these options. Furthermore, the selected cases fell into the category of representative cases since the interviewee's everyday situations were studied (Bell et al. 2022). The insights derived from a case study empower individuals to apply the lessons learned to different scenarios, which increases the transferability of the study (Schoch, 2020). To contribute to current research a multiple-case study was used, adding a comparative element to the research design (Bell et al. 2022). A multiple-case study method enabled comparison and contrasting among different cases, making it possible to recognize both similarities across all cases and unique aspects within specific ones (Bell et al. 2022).

### **3.3 Case selection**

For this thesis, the cases were selected through purposive sampling, meaning participants were strategically selected to fit this research (Bell et al. 2022). The cases consisted of former elite athletes that turned into entrepreneurs. With the methodology of purposive sampling as a foundation and considering that the selection of cases was driven by the research question, specific criteria were utilized during the sampling process. As mentioned earlier, this study focuses on elite athletes, who can be defined as individuals who have reached the highest level of performance in their sport and compete on a national or international level in his/her own age category (Swann et al. 2015). To ensure a balanced representation, the authors selected an equal number of participants with team sports and individual sports backgrounds. The division of participants into two categories, one with individual athletes and one with team sport athletes,

provided insights into the ways in which the type of sports that is previously practiced influences decision-making in early-stage ventures. The additional criteria that applied to all participants, independent of the group are listed below.

#### Level of sport participation: Elite level

When defining an elite level athlete this research will use the international and or national level categorized by Swann et al. (2015) as it is the most used criteria for what makes an athlete an elite athlete. More specifically it includes the following subcategories of athletes:

- Medals, titles or records at major international competitions
- International medals, records or titles
- World class
- Participation in major international competitions
- International level
- Prospective Olympians
- Competing at international and/or national level
- Represent country/national team
- National titles
- National level
- Participation in national leagues

#### Position within the company: Founder

Since this research concerns decision-making, the authors collected data from individuals who have the authority to actually make them. Chen et al. (2022) concludes that the founding team is responsible for decisions within a new venture. Taking this into account the authors included being a founder as a criterion for participation in this study.

#### Operating market: European Union

Environmental factors and the ecosystem in which a venture operates can significantly influence its operations, its decision-making and its overall development (Suresh & Ramraj, 2012). In order to limit the impact of environmental factors and ecosystems this research was conducted on entrepreneurs operating within the European Union, who are collectively regulated and affected by the EU policies (Murdock, 2012).

The previously mentioned criteria were established to select interviewees pertinent to the research question, thus shaping the sampling strategy to be purposive (Campbell et al. 2020). A table listing the participants of the study is provided below:

**Table 1** Overview of selected cases

<b>Group 1 - Team sports background</b>					
<b>Person</b>	<b>Gender</b>	<b>Age</b>	<b>Nationality</b>	<b>Sport</b>	<b>Years in business</b>
R1	F	22	Latvia	Volleybal	1
M1	M	30	The Netherlands	Football	5
B1	M	24	The Netherlands	Football	2
C1	M	24	The Netherlands	Football	2
<b>Group 2 - Individual sports background</b>					
<b>Person</b>	<b>Gender</b>	<b>Age</b>	<b>Nationality</b>	<b>Sport</b>	<b>Years in business</b>
T2	F	23	Germany	Running	1
F2	F	24	Sweden	Golf	1
J2	M	30	Denmark	Track and Field	2
P2	M	52	The Netherlands	Tennis	28

### 3.4 Data collection

The method used for the collection of the empirical data in this study is semi-structured interviews. This data collection method is suitable when the research objective is to address social and behavioral research questions (Adeoye-Olatunde & Olenik, 2021). Semi-structured interviews allow participants to freely express their perspectives while staying close to the main topic (Patel & Davidson, 2019). Furthermore, this way of data collection allows the researcher to ask follow-up questions when needed (Adeoye-Olatunde & Olenik, 2021). Due to its ability to determine the appropriateness of the questions a pilot interview was conducted (Adeoye-



Olatunde & Olenik, 2021). This interview lasted 55 minutes and led to no major changes in the interview guide and also confirmed that the sound quality of the recording was satisfactory.

When contacting potential participants, via LinkedIn or email, information about the research was provided. In case the potential participant showed interest in participating, the authors proceeded to review the screening questions to ensure their alignment with the established criteria stated previously. When informed consent was given a date and time for the interview were picked. Before starting with the interview questions a consent form was shown and read to the participants who then could give verbal consent for using the data from the interview (Appendix B). In total eight digital interviews ranging between 45 and 92 minutes were conducted online via the meeting software Google Meet. All interviews except for one were conducted in English to avoid the need of translation and the associated risk of misunderstanding. However, due to language barriers one interview was conducted in Dutch and then translated to English after the transcription. All interviews were recorded in audio format to facilitate transcription. The transcription software Fireflies.ai was used to transcribe the interviews more efficiently. Nonetheless, manual adjustments were made to ensure the accuracy of all the data in the transcripts.

The interview's structure was aligned with the pre-established interview guide (Appendix A), but supplemental questions were asked in case the interviewer saw the necessity and the possibility to do so. As recommended by Bell et al. (2022) the interviews started by asking more general questions about the sports and entrepreneurial background in order to make the interviewee more comfortable before moving onto the more specific questions. As outlined in the interview guide the questions were logically divided into three groups, each covering a specific area that all related to the research question. The initial set of questions focused on the interviewee's backgrounds both in sports and entrepreneurship. The following set aimed to explore their decision-making processes, and the final set of questions regarded decisions during challenges and setbacks.

In order to gain insights into how sports experience shapes decision-making for entrepreneurs in early-stage ventures the authors limited the questions to only the first venture founded by the interviewee. Furthermore, the questions were narrowed down to solely address the early stages of the venture, which limited the questions to only regard the first two years of the business. This limitation of scope was based on the concept of introspective sensemaking mentioned by El-Awad (2023) which explains that entrepreneurs tend to mainly rely on recent experiences when dealing with new events.

### **3.5 Data analysis**

The data analysis reflected the inductive approach by making interpretations of raw data (Thomas, 2003). In this study the raw data consisted of transcriptions of the semi-structured interviews. The transcriptions of the interviews amounted to 144 pages of text, facilitating subsequent analysis.

Thematic analysis was the used approach for analyzing the data. Following the recommendations of Ryan and Bernard (2003) repetitions, metaphors and analogies as well as similarities and differences were considered when identifying themes. Regarding the structure of the data analysis, this thesis followed the suggestion of Gioia et al. (2013). They present the Gioia method which initially categorizes data into “1st-order concepts” based on words and sentences that could help answer the research question. The second step is to group those 1st-order concepts into “2nd-order themes” based on common themes and concepts identified. Ultimately the 2nd-order themes are put together into “aggregate dimensions”.

In practice the process of implementing this methodology consisted of the following steps. Following the transcription of the interviews specific terms and responses that were considered relevant were marked to identify 1st-order concepts. In this step the authors identified similarities, differences and repetitions in the transcribed material. Both authors independently underlined all data that could potentially help answer the research question. A total of 327 quotes were underlined. Subsequently, both authors collaborated to review these quotes and collectively categorized them in themes and eliminated themes deemed irrelevant to the research question. This process led up to the identification of fourteen 1st-order themes. In the next step the authors grouped the 1st-order themes into six 2nd-order themes. It was ensured that all six themes were relevant to the research question. Finally, the 2nd-order themes were grouped into aggregate dimensions which were Risk perception, External input and Adaptability. These three dimensions were identified from the interview as influencing decision-making. The data structure which was a result of the data analysis is shown in Table 2, which can be found below.

**Table 2** The data structure of the findings

<b>1st-order themes</b>	<b>2nd-order themes</b>	<b>Aggregate dimensions</b>
- Impact on stakeholders - Accountability/responsibility - Attitude towards failure	Consequences of decisions	<i>Risk perception</i>
- Reliance on others - Reliance on yourself	Perceived control	
- Working individually/together - Trust - Urge to make own decision	Autonomy	<i>External input</i>
- External help - Internal help	Information seeking behavior	
- Dealing with challenges - Having a plan/structure	Resilience	<i>Adaptability</i>
- Availability of resources - Acquiring missing resources	Resourcefulness	

### **3.6 Limitations**

#### Research design

An epistemological approach of interpretivism has its inherent limitations. As mentioned by Alharahsheh and Pius (2020) it has been criticized for its inability to come up with universal law, overemphasizing subjective reality and diversity. They also highlight the issue of generalizability, due to the fact that interpretive research focuses on context-specific cases rather than broader ones. The use of a qualitative approach can also be seen as a limitation due to its reliance on the researcher's personal view of what is significant within the data (Bell et al. 2022). Similar critique can be directed towards the use of thematic analysis. Bell et al. (2022) indicate that thematic analysis is very inclusive, which potentially causes different studies to identify varying themes, which consequently can lead to differences in the findings and therefore also to decreased reproducibility and reliability. While the decision for using case studies was motivated by their ability to capture contextual data it is also worth mentioning that

this type of research design may fall short in capturing broader perspectives, potentially leading to reduced generalizability. (Bell et al. 2022).

### Case selection

As acknowledged previously, a case study approach has its inherent limitations. This also applies to the selection of cases. The use of purposive sampling is known to hinder the generalizability of a study (Bell et al. 2022). Nevertheless, the purpose of this study was not to generalize the findings, but rather to understand how experiences within sports influences entrepreneurial decision-making. Upon examining the industries of the interviewed entrepreneurs there was no overrepresentation of any industries. The aim was to include as many sports and industries as possible, however due the limitations of time and the used selection criteria, this limitation could not be filtered out completely. The authors chose to reach out to the cases via personal contacts and leveraged their personal networks. As one of the authors has a background in football there is an overrepresentation of this sport within the team sports group, which makes the findings for team sports more specific towards football instead of team sports in general.

One additional limiting factor regarding the selected cases is the number of cases. Due to limited time and resources the study only gathered insights from eight entrepreneurs: four with a background in team sports and four with a background in individual sports. This limits the generalizability and also limits the possible variation of sports within the groups.

Another limitation of the case selection is the variability within the categories of team and individual sports. The sports that can be included in these two categories can vary in numerous aspects, such as the team size, the level of aggression and the nature of the sport (open or closed). For example, football has larger teams and has distinct interactions compared to a team sport like volleyball. Variances also exist among individual sports, for instance, golf where your actions are not directly influenced by opponents, differs significantly from tennis, where your actions are highly dependent on your opponents. This exemplifies that decision-making can be influenced by variances among the sports, thus not solely by the team- or individual nature of the sport. Hence, the findings may not capture a comprehensive picture of how sports experiences influence decision-making, which lowers the generalizability of the study.

### Data collection

The use of interviews as a collection method for empirical data calls for some drawbacks compared to other data collection methods (Bell et al. 2022). One drawback that is mentioned

is how interviews on their own are rarely able to give deeper insights into behavior. Further, Bell et al. (2022) mention that the interviewee might make him- or herself look better when narrating previous behaviors. This needs to be considered in this research as it delved into people's own perception of their decision-making. Conducting interviews also highlights the importance of the interviewer's role. If the questions are not asked in a neutral way or if the interviewer leads the interviewee into believing there is a correct or incorrect answer there is a risk that the collected data is not precise (Harrell & Bradley, 2009). To maintain a neutral perspective the interview guide was designed in a neutral way and both authors of this thesis attended the interviews.

### Data analysis

Thematic analysis has been criticized for its flexibility, which contradictory is also considered as its main strength (Bell et al. 2022). Both authors collaboratively conducted the data analysis stage of this research, picking the 1st-order concepts, grouping them into 2nd-order themes and finally deciding on aggregate dimensions. This approach allowed for discussions regarding alternative interpretations of the data which further increased the credibility of the study. Nevertheless, critique could be directed towards the use of the Gioia method, due to its focus on the researcher's interpretation which is influenced by the researcher themselves, this limits the validity of the study. However, interpretation is inevitable when making sense of social actions, since observation alone is insufficient as a way of gaining insights into them (Mees-Buss et al. 2022).

### **3.7 Ethical considerations**

Qualitative studies should take ethical aspects into consideration due to their in-depth nature, especially when conducting interviews (Arifin, 2018). Bell et al. (2022) explain that the main ethical principles to have in mind when collecting data through interviews are informed consent and privacy (Bell et al. 2022). Informed consent was obtained by reading the respondent a consent form (Appendix B) which contained information about the used observation techniques, the voice recording, the purpose of the study and the right to withdraw from the study at any time. Privacy was respected by keeping interview questions focused on the topic, not delving into realms that could be regarded as too private.

## **4. Findings and Analysis**

The empirical focus of this research is to understand the role a background as a team sports athlete versus as an individual sports athlete plays in decision-making in the early stage of a venture with findings being presented and analyzed below.

### **4.1 Risk perception**

During the interviews, it became clear that the perception of risk played a significant role in shaping decision-making processes. Risk perception can be described as an individual's assessment of the risk present in a situation, influenced by factors such as how the situation is labeled, assessments of the extent and controllability, and the individual's confidence in these assessments (Baird & Thomas 1985, Pablo et al. 1996). In the interviews the entrepreneurs viewed the consequences of a decision and the perceived control they had over the outcome of a decision as the two primary factors shaping their perception of risk, which consequently influenced their decisions. When regarding the consequences of their decisions, the group of individual athletes showed less concern about the effects of their decisions on stakeholders and mainly felt responsibility towards themselves. Furthermore, they showed higher acceptance towards failure as a consequence of their decisions. This lowered their perception of the risk of their decision and empowered them to take on more risk in comparison to the group of team sports athletes. This last-mentioned group reflected a lot on the consequences their decisions had on others, in both their sports career and their entrepreneurial career, which resulted in a higher perception of risk and ultimately in a greater tendency to avoid making risky decisions. These findings correspond with earlier research that states that a person's perception of risk shapes their decisions and behavior (Siegrist et al. 2005). Furthermore, the findings are consistent with the findings of Reynolds et al. (2009) that state that individuals are less inclined to avoid risks when making personal decisions but become more risk-averse when their choices impact others. Moreover, athletes in individual sports indicated that the outcome of their decisions highly relied on themselves, and therefore perceived a high sense of control over the outcome of their decisions, which ultimately let them take on more risk. Contradictory, team sports athletes felt that the outcome of their decisions relied heavily on others and therefore felt low levels of control, which made them adjust their decisions and the riskiness based on the other people that were involved. These findings are consistent with the findings of Simon et al. (2000) that state that perception of control influences the perceived risk and thereby influences decision-making.

#### **4.1.1 Consequences of decisions**

##### ***Team sports athletes: impact on others***

Founders with a team sports background were more concerned about how their decisions could negatively impact stakeholders. Consequently, they showed more deliberation and looked for ways to avoid failure and mitigate risks. Furthermore, they expressed a high sense of responsibility towards their team rather than solely focusing on themselves.

R1: illustrating that she considers her co-founders when making a decision

*“I think I've always, since then, always kept in mind that, like, whatever I do affects the others as well.”*

R1: illustrating her consideration for stakeholders and her sense of responsibility for her decisions towards stakeholders

*“I really don't like to disappoint others. I feel like I would rather disappoint myself than the team or anyone else that I'm doing the work for. So, I would sometimes put other people's expectations on me a bit higher. Maybe that's not a bad thing, or maybe that just shows that I have experience being a team player.”*

C1: illustrating the perceived impact of his decisions on stakeholders and how this leads to risk adversity to avoid failure

*“That a wrong decision by me could lead the team to lose, that made me often try to take a bit of the safer option. There's always some kind of team pressure. You don't want to be the one that fucks it up.”*

B1: illustrating how the risk of failure when making a risky decision made him doubt and consider how it would impact his venture

*“It did create some doubt, but ultimately, it didn't present enough negative outcomes to deter us from moving forward with the decision. It impacted my decision-making for sure, but not enough to change directions.”*

##### ***Individual sports athletes: impact on themselves***

Founders with an individual sports background were focused on the consequences of their decisions on themselves instead of on the team around them and their stakeholders. They showed a greater openness towards failure and perceived failure as a learning experience, which

empowered them to take greater risks. This might explain their greater openness towards failure, which lowered their risk perception and thereby influenced their decision-making.

T2: illustrating her open approach towards failure, both in sports and in her venture

*“I was learning by doing. And that is, I think, a pretty good conclusion for both. As an athlete, you try out and learn from it, and as an entrepreneur, you also try out and learn from it.”*

T2: reflecting upon her sense of responsibility for her decision in her sport and in her venture

*“I mostly felt the responsibility for myself, but not necessary towards others”*

*“Still towards myself because there, I also didn't want to let myself down.”*

F2: illustrating how her athlete background shaped her attitude towards failure in her venture

*“You have to keep on going and you have to learn from what you've done bad or poorly and learn from the mistakes... especially entrepreneurial wise, that mistakes happen. You do fail, and it is fine if you learn from them instead and move forward from that... why did I fail? What could I do better and what can I learn from this and then do it again at some point, you are going to succeed. And I think that's the main thing that I've taken with me from the sport.”*

J2: illustrating his self-accountability

*“And another thing is also the accountability I have for myself that I really try to not make excuses about anything because you can impact your own life and if you don't succeed, there are of course, always a lot of factors, but you have to always look at yourself and see, could I do something different here?”*

J2: illustrating his sense of responsibility for his venture

*“I often have like, that's something I would like to do myself. I would like to take responsibility for it myself.”*

#### **4.1.2 Perceived control**

##### ***Team sports athletes: reliance on others***

The entrepreneurs in the team sports group indicated that the outcome of their decisions relied heavily on others during their sports career and therefore felt a low level of control on the outcome of their decisions. They showcased a similar feeling during the early stages of their



ventures. This low level of control influenced their risk perception and thereby their decision-making.

R1: illustrating how she adapted her decision depending on her teammates' skills in sports

*"I kept in mind the strengths and weaknesses of my team members because I knew that I was kind of thinking like, what is the best outcome with the means that we have? And my teammates are the means that we have."*

R1: displaying how she was reliant on stakeholders (customers) when making decisions

*"When you have someone from the outside requesting things for you, there's nothing you can do, you need to live up to that standard or you lose a client. The end decision maker or the end reason that makes the final call can often be not you, but someone else."*

M1: illustrating that dependence on his employees in his venture made him choose a decision that minimized the risk of being short on staff

*"What I then chose was to put a teacher on all three lessons to free myself. So that I could always step in and also guide the trainers in developing their own skills. So, if I wasn't teaching myself, I was at least present somewhere to train the teacher. Actually, to coach the trainer and guide them so that the quality of the lessons became better. And in case someone was sick or late or couldn't come, then I was always available to step in."*

B1: illustrating how the outcome of a decision in his venture was not completely in his control, and subsequently how it influenced his decision-making process.

*"The outcome wasn't entirely in our hands because there are external factors beyond our control. We had to have confidence that we could handle whatever challenges arose, but we were still dependent on external factors we couldn't influence."*

*"In the beginning I made decisions much slower, and I took less risk"*

### ***Individual sports athletes: reliance on themselves***

The group of individual athletes indicated a lower perception of dependence on others during their sports career and indicated a higher sense of reliance on themselves when assessing to what extent they can influence decision outcomes in their venture compared to the team sports athletes. This sense of self-reliance positively influenced their sense of control over the

outcomes of their decisions. However, they indicated that this sense of control was lower in their venture career than in their sports career due to the involvement of others.

T2: illustrating her preference for self-reliance, and how the sense of reduced control impacts her decision-making process

*“Of course, you train together, but it comes down to you moving your own legs and sometimes it is a little bit uncomfortable to give control out of your hand (in the venture)”*

*“I had a hard time giving away control and trusting others that they will perform their given tasks with the same consciousness, with the same reliability as you would do it, but then you have to do it to then see how it would turn out.”*

F2: illustrating how her sports background influenced how she aimed to have control in her venture

*“I actually think it has affected me a lot in that area because I think the first reason why I wanted to do it by myself was because I play golf by myself... And that's why I always thought I have to do this by myself because I know best, I know what I want.”*

J2: illustrating his sense of control over the outcomes of his decisions

*“I'm responsible for my own success, so I have to, everything comes down to me... the thing is that you are more in control of your results yourself”*

P2: illustrating his feeling of dependency on himself in his sports career and how this is similar in his venture

*“Tennis really is a 1-on-1 duel. You have to be fully fit and focused to win a match. And looking at my business now when I'm on the phone with a business contact or having a conversation with someone, it's often also one-on-one conversations. Of course, I need the team around me to do what I'm doing now. But ultimately, it also comes down to your own decision-making authority.”*

## **4.2 External input**

The second major factor that was found to influence decision-making processes was external input. According to Schiebener and Brand (2015) decision-making processes are modulated by

external influences. Differences in this aspect between the two groups were identified concerning autonomy and their openness towards external input, as well as the sources utilized to fill in missing information, and thus their information-seeking behavior.

“Entrepreneurial autonomy is defined as a business owner/founder having decision rights regarding what work is done, when it is done, and how it is done” (Gelderen, 2016, p.542). According to Nia and Besharat (2010), individual athletes tend to exhibit higher levels of autonomy compared to team sports athletes. This higher level of autonomy might explain the findings, which showed that individual athletes tended to make decisions independently, whereas team sports athletes often felt the need to discuss with their teammates and engage in collaborative decision-making processes. In contrast to the team sports group, individual athletes showed lower trust in their colleagues, a preference for working alone, and a higher urge to make their own decisions. These findings also correspond with other findings of Nia and Besharat (2010) that suggests that team sports athletes score higher on agreeableness in comparison to individual sports athletes. Trust is a component of agreeableness, and facilitates interpersonal connections, enabling individuals to depend on others and foster group activities and relationships (Nia & Besharat, 2010). The divergence in decision-making approaches could be further explained by Wageman's (1995) research, indicating that increased familiarity with interdependence not only fosters acceptance, but also leads to a preference for it over time. Looking at the sports careers of the two groups, team sports athletes were interdependent on their team in their sports career, while individual athletes had to make decisions more autonomously and are therefore less familiar with interdependence in decision-making. This might explain the lower preference for collaborative decision-making for the individual athletes compared to the team sports athletes.

However, when entrepreneurs lacked a certain skill or if there was an information gap, their approach to seeking for information in order to solve this gap differed among the two groups. Information-seeking behavior is a crucial form of purposeful behavior in both social and business contexts (Guo, 2011). Information-seeking behavior is defined as the “purposive acquisition of information from selected information carriers (e.g., messages, sources and channels)” (Johnson et al. 1995, p. 275). Whereas the team sports athletes displayed a preference for seeking help from within their organization, individual athletes tended to seek external expertise, often from sources beyond their organizational scope. This contrast may be attributed to their sports backgrounds. On the one hand, team sports athletes are used to having a pre-established team consisting of other players, physiotherapists and coaches from whom they could seek and share information. On the other hand, individual sports athletes did not

have this pre-selected team and had to independently gather resources such as coaches, training partners, and nutritionists. Consequently, the latter group is more accustomed to seeking information externally, in contrast to team sports athletes who had greater access to internal information sources.

#### **4.2.1 Autonomy**

##### ***Team sports athletes: collaborative decision-making***

When it comes to autonomy, the team sports group provided numerous examples of their preference for collaborating and making decisions together.

C1: illustrating the lack of autonomy during his sporting career

*“And he decided what I had to do, and that was when I performed the worst. So, I really didn't like it when I couldn't make my own decisions there. Sometimes I didn't feel like I could take them because the coach wanted me to do something, and also, other players demanded from me that I would do certain things.”*

C1: illustrating how he made joint decisions during the early stage of his venture

*“In the beginning, I was always like, I need to talk with him because am I going to buy this thing or do I need to talk with him again? And in the beginning, I did that often, and I waited for his reaction. And then you discuss it a bit, but now, sometimes I buy something and then I even forget about it.”*

R1: illustrating her inclination towards making decisions together in the early stages of her venture

*“Yeah, in the early stages, definitely also with the help of others. I feel like if you've never done it, to consult others to help with the decision-making. And then again, once you build that expertise over time, then you can start doing it autonomously. But in the beginning, I would say we discussed almost every decision we made in every area.”*

B1: illustrating how important it is to discuss decisions with the team in his venture

*“Well, mainly because you have a decision in your mind, but you doubt. And when you discuss it with others, who also give their opinions or perspectives on it, that can lead to two things. You either get confirmation that what's in your head is the right decision, or it makes you*

*think a bit more about whether it's actually right, which brings out other arguments to perhaps make a different decision.”*

***Individual sports athletes: independent decision-making***

The responses of the individual sports group showcased their preference for making their own decisions, and their inclination towards working autonomously. Furthermore, they indicated that this often originated from a lack of trust in others.

F2: illustrating how her sports background has stimulated her autonomy and the effect of this in the early stages of her venture

*“It (golf) has also given me the trait of me not really trusting other people because I think from doing something myself for so long and always having to trust my own instinct to hear other people's instincts is a bit hard for me sometimes to really kind of hear what they have to say... Not saying that I don't like teamwork either, but it's more I trust myself so much due to my sport that's kind of portrayed me later on as well.”*

P2: illustrating how his background in sports fostered his urge for autonomy in the early stages of his venture

*“I think that the fact that I have been an individual athlete led me to want to be my own boss and not be dependent on a whole board of people.”*

T2: illustrating how she struggled to trust her team and to give away control in the early stages of her venture

*“Probably giving away control and trusting others that they will perform their given tasks with the same consciousness.”*

*“I learned that I can actually trust my teammates a lot, so they proved me wrong. But it was uncomfortable in the beginning.”*

T2: illustrating her preference for working autonomously in her venture

*“I think probably more autonomously, ... I don't want that this person always depends on us coming together in order to get the job done.”*

#### **4.2.2 Information seeking behavior**

##### ***Team sports athletes: seek internal help***

The team sports group provided numerous instances of seeking information within their team when making decisions, thus leveraging internal information within their organizational context.

R1: illustrating her internal approach towards consulting when making decisions in sports

*“You consult your coaches and your teammates about it a lot.”*

R1: illustrating how she used internal help from her team when making decisions in the early stage of her venture

*“If I’m like, okay, I feel like this is something that needs to be discussed or I need their approval on or something, or if I simply cannot make a decision on my own, or I’m unsure, and I feel like I could benefit from some help or advice, then I go to my teammates”*

C1: illustrating how he sought internal support in his decision from his co-founder.

*“In the beginning, I was always like, I need to talk with him because am I going to buy this thing or do I need to talk with him again? And in the beginning, I did that often, and I waited for his reaction. And then you discuss it a bit.”*

B1: illustrating how he used his venture team to gain clarity on what decision to make

*“That help and communication with others, which may offer different perspectives, indeed influences my final decision.”*

##### ***Individual sports athletes: seek external help***

Seeking help from actors external to their venture rather than seeking for help within the team seemed to be the more occurring approach for the individual sport athletes when filling skill or information gaps.

J2: illustrating how he had to seek for external expertise himself when building his team in his sports career and how he did this similarly in the early stages of his venture

*“We need to get the best coach, we need to find the best coach, we need to find the best treatment people, we need to create the best team around the business, around the project, and that was the same.”*

T2: illustrating how she approached consultation from external experts

*“We always had the opportunity to ask experts. So, when we needed some legal advice, we could ask a patent attorney. Or when we were kind of calibrating our business plan, we could also talk to business advisors. So, yeah, experts.”*

J2: on how external people guided him in his venture

*“I had some external help in the process... And they were actually the ones with the idea of starting it.”*

P2: illustrating how consultation from external parties were important for the decision-making in the early stages of his venture

*“it depends a bit what decision it is about, but you often need external parties when making your decisions.”*

*“I have knowledge, but there are parties that know more on certain aspects and you need to use that. You have to be open to external information.”*

### **4.3 Adaptability**

The final aggregate dimension derived from the interviews that was shown to influence the decision-making of the entrepreneurs was adaptability. In this thesis adaptability entails cognitive adaptability which is defined as the ability for a team or individuals to adjust and change the decision-making approach in an appropriate and effective way based on the environment (Haynie et al. 2016). According to research by Wang et al. (2020), adaptability influences decision-making, due to its ability to influence the effect of a decision. In the interviews it was discovered that resilience and resourcefulness were two factors that significantly influenced the adaptability of the athlete-turned-entrepreneurs.

Resilience can be defined as the ability to react and adapt positively to a negative experience (Xing & Sun, 2013). During the interviews the team sports group attributed their resilience to the structure and support they had around them, both during their sports and their

venture career. They mentioned receiving assistance and motivation from others in their decision-making process when encountering specific obstacles. Contrary, the individual sports group stated to have gained resilience by being responsible for their decision when faced with challenges themselves, and also by having to motivate themselves and not rely on others. Although the origin of resilience varied among the groups, the actual level of resilience seemed to be the same, subsequently impacting their adaptability and decision-making processes similarly. Both groups were equally motivated to overcome the challenges they faced in both their sports careers as well as their entrepreneurial careers. They indicated that their resilience enabled them to adapt to the decision environment in order to make the right decisions and overcome the challenges (Delladio et al. 2023).

Resourcefulness within the field of entrepreneurship can be defined as “A boundary-breaking behavior of creatively bringing resources to bear and deploying them to generate and capture new or unexpected sources of value in the process of entrepreneurship.” (Williams et al. 2021, p.2). Resourcefulness and the use of resources can be explained with the help of two decision-making approaches, being causation and effectuation (Michaelis et al. 2020). Causation can be described as searching and collecting different means to achieve a certain effect while effectuation entails using the means you have and being open to a set of possible effects you could have with those means (Sarasvathy, 2001). During the interviews it was found that the team sports group relied on causation as a decision-making logic, both in their sports career as in the early stages of their ventures. Contrary, the individual sports group showed higher use of effectuation, both in their sports career and during their entrepreneurial career. The use of different decision-making processes can be explained by moderation effects such as the bird in the hand principle, which is a principle for effectuation, and stands for using the resources you have available (Hensel & Visser, 2020). This principle was more prevalent for the individual athletes, which aligns with their preference of effectuation as their decision-making logic. Furthermore, research has indicated that increased environmental uncertainty leads to effectuation, whereas reduced environmental uncertainty and increased stakeholder pressure leads to causation (Reymen et al. 2015). Given that team sports typically involve more stakeholders and possess a more predictable structure due to the inherent organization of a team, it is understandable that athletes in team sports might adopt a more causal approach throughout their careers. In the interviews they demonstrated to also use this logic during the early stages of their ventures. Conversely, the sports environment of individual athletes tended to be more unpredictable due to the absence of an external structural framework, motivating the use of effectuation (Reymen et al. 2015).



### 4.3.1 Resilience

#### ***Team sports athletes: resilience through social support***

The team sports group demonstrated that their resilience stemmed from social support, evident both within their sports careers and entrepreneurial ventures. This support helped them be more resilient and helped them to make decisions to overcome challenges.

R1: illustrating how her previous sporting career helped her when dealing with challenges and how it enabled her to offer more social support in her venture

*“We've been having some communication challenges about what information is being communicated, what has not been communicated, and stuff like that. And I think my experience with working in a team and making sure that everyone's head is in the game instead of somewhere else”*

C1: illustrating how the decision to quit his sport was not an option due to social support

*“I didn't even think of quitting then because it was so clear that I had to make it happen, to make family proud, to make friends proud. There was no option in deciding that I wanted to quit. It wasn't even a decision. It basically. It could be, but it wasn't in your head. It's not an option.”*

C1: illustrating how support from his family made him resilient and ultimately helped him to overcome challenges in his venture

*“It enabled me to go more all in and to do things. Even though there is a day that you don't feel like it or you don't really have time for it, you make the time for it just because you want to move.”*

B1: illustrating how his social support helped him overcome obstacles during his sports career

*“By talking about it or discussing it with others who might have a solution. So, for example, your coach. Or in this case, my father. To discuss, ultimately coming to a solution that you can do something you initially couldn't.”*

#### ***Individual sports athletes: resilience through self-reliance***

The individual sports group indicated that they had to deal with challenges themselves rather than with the help of others as a way of overcoming the obstacles, both in their sports and in the early stages of their venture, which made them resilient.

T2: illustrating how she became more resilient through her sport through depending on herself  
*“It is definitely making me more resilient. So, if I face any challenges in the entrepreneurial process, I'm determined to overcome them. Also, because I recently overcame or actually have already overcome many injuries in my sports career, I would say, and in the moment, you always think, okay, this is stopping me from my sports completely. But then you work around them, and you will get back to your old level if you put in the work. And the same applies to the entrepreneurial journey.”*

F2: illustrating how her sport helped her develop personal structure which helped her overcome setbacks

*“A round of golf that takes such a long time, and to just keep your cool the whole round is quite hard. And that has got me to have a lot of patience with myself and to really understand that even, like, one mistake happens, and you have to move on with it and you just kind of have to forget it and just learn from it instead of kind of going down and just being so upset with yourself with the mistake and just quitting. So, I think that has given me a lot of confidence in my personal life outside of sports, with just understanding that mistakes happen and you do fail. But to move forward with it and build upon it and just grow, I think that's the main thing that I've learned from my sport”*

J2: illustrating how he became resilient by overcoming setbacks by relying on himself

*“The ability to set a goal and the ability to have resilience in that goal, but also the ability to know that there's a process going before you can see the results. And you have to put in so much work without any security that there will be a success or so much stuff can happen. But you still need to go through the process and try to rest in that process. That is something that I have been struggling with, but that's definitely something you learn in sports. It's a long process, and if you don't keep going, then you will not succeed.”*

#### **4.3.2 Resourcefulness**

##### ***Team sports athletes: Causation***

Founders with a background in team sports opted for causation both in their venture and in their sports career. They start with a specific goal in mind, and they try to achieve this goal by acquiring the needed resources to do so.

R1: illustrating her focus on the goal instead of on the available resources during sports

*“It would be the goal. I think it would be the outcome of the match”*

B1: illustrating his gravitation towards causation both in sports and in business

*“I had a specific goal in mind and what I needed to achieve that”*

*“I’ve always wanted to start my own business since I was young. But you do need certain resources for that. You can’t just say, tomorrow I’m starting my own business. Yes, but what are you going to do then? You need certain resources and knowledge of certain things to set a goal or your ultimate goal for what you want when you start a business.”*

C1: illustrating how causation was the decision-making process of choice during both his sporting career and his venture

*“To get to the goal was always to become a professional footballer, and that was every day. Every day, every training was towards reaching that goal.”*

*“We had a goal of becoming the biggest podcast in the Netherlands on that topic, and that is what happened. So, yeah, so that was, yeah, you could say that we wanted to do it that way, but also with buying the... The things that we needed for it. That always was to reach that goal.”*

### ***Individual sports athletes: effectuation***

The individual sports group seemed to prefer effectuation both in their venture and in their sports career. They leverage the resources they have around them instead of mainly focusing on acquiring specific resources in order to reach certain goals.

T2: illustrating that her training in sports correlated more with effectuation

*“You only have your body and your physique. And then it’s about what can you perform with this? So, you’re trying out what you can do with it and that’s then training. And through the training or through the trying what you can do, you become better and then you can do new things.”*

T2: illustrating that she tried to leverage the available resources even though these resources were limited

*“As a young entrepreneur, we also don't have too many resources. So, we just have to see how we can make things work gradually.”*

P2: illustrating how he used the approach of effectuation when starting his business, leveraging already existing contacts from his sporting career

*“Well, look, the opportunity I got also... I also started partly because I played tennis myself. So, the network, for example, the relations with the KNLTB, I got that because I played tennis myself. So, I know a lot of people from that network.”*

F2: illustrating how effectuation and using the competences she and her co-founder already had were leveraged to come up with their venture

*“We had a conversation because she wanted to do something with analytics and I wanted to do something with golf. And then we kind of found something in the market that was missing in the golf industry that can automate all the statistics in golf. So that's how we kind of started it.”*

#### **4.4 Outliers**

During the interviews the authors were able to identify several different patterns in the decision-making of elite team sports athletes and elite individual sports athletes during the early stages of their ventures. However, in some cases participants expressed views contrary to their respective group's tendencies, aligning more closely with the other group instead. Below, these differences are being discussed and potential explanations for why they occur are provided.

Several outliers emerged in M1, who exhibited a greater inclination towards seeking external input and consulting experts for additional information compared to other team sports athletes. Furthermore, he indicated to deal with challenges himself, not seeking support initially. The fact that M1 displayed different behavior during his venture career could be explained by the composition of his venture. Additional literature research was conducted in order to provide an explanation for this situation. Unlike the other team sports athletes, he solo founded his venture. Founding teams are proven to complement each other's skills and knowledge (Spiegel et al. 2013), which therefore makes seeking external information less necessary. Solo founders cannot rely on their team as they do not have one, and are therefore more likely to look for external help. Furthermore, when it comes to resilience to overcome challenges, co-founders also offer each other social support (Howell et al. 2022). Solo founders are responsible for

making hard decisions and facing the consequences without anyone else to share the load (Yang et al. 2020). However, with co-founders, the experience is different, as they can provide support to each other due to their shared experience (McMillan & Chavis, 1986). This might provide an explanation for why he as a solo founder gave different answers.

Also, within the individual athlete group there was an outlier observed in the form of F2. Despite the fact that she had a hard time trusting people, and therefore preferred autonomous decision-making, she also showed that in some cases she participated in collaborative decision-making processes. This dual approach could be explained by looking at her sports background as a golfer, where a similar pattern was observed. Despite pursuing a career as an individual athlete, she closely collaborated with her team, consisting of her coach, caddy, and mental coach when making decisions. This experience in collaborative decision-making might explain why she participates in this form of decision-making during the early stages of her venture as well, since Wageman (1995) found that increased familiarity with interdependence not only fosters acceptance of it, but also leads to a preference for it over time.

## **5. Discussion and implications**

### **5.1 Main research findings**

This thesis explored various factors impacting the decision-making of elite athletes that turned into entrepreneurs in the early stages of venture creation. Differences in three different domains were found between the former team sports and individual sports athletes. The first domain in which variances were discovered between the groups was risk-perception. Individual athletes demonstrated a lower concern for stakeholder impacts, feeling primarily accountable towards themselves, which fostered greater acceptance of failure and a higher tendency towards taking risky decisions. In contrast, team sports athletes were more focused on the consequences of their decisions on others, leading to a heightened perception of risk and a tendency to avoid risky decisions. Secondly, differences among the two groups were found concerning their approaches towards external input. Individual athletes tend to operate independently, exhibiting lower trust in colleagues. They indicated a preference for seeking external expertise beyond organizational boundaries. Conversely, team sports athletes engage in collaborative decision-making within their team, relying on internal support structures and teammates for guidance and assistance. The final area in which differences were discovered was the area of adaptability, where resilience and resourcefulness were touched upon. Team sports athletes attribute their resilience to external support systems and motivation from others, whereas individual athletes gained resilience through self-reliance and self-motivation. Despite these differing origins of resilience, both groups exhibit similar levels of adaptability, driven by their determination to overcome challenges in both sports and entrepreneurial careers. Additionally, team sports athletes tend to employ a causation-based decision-making logic, while individual athletes favor effectuation, influencing their approaches to decision-making in both athletic and entrepreneurial contexts. An interconnection between two aggregate dimensions, being risk perception and adaptability is observed here. In the first mentioned dimension it was found that team sports athletes tend to feel a stronger responsibility towards stakeholders and reflected on the effects of their decisions on these stakeholders, which increased their risk perception and decreased the risks they were willing to take. This finding connects to adaptability, and particularly to resourcefulness, as increased stakeholder pressure was found to lead to causation (Reymen et al. 2015), which is the preferred decision-making logic for the team sports athletes. Individual sports athletes on the other hand have a lower feeling of responsibility towards their stakeholders and might therefore feel lower stakeholder pressure, which leads to effectuation.

## **5.2 Practical implications**

In line with Vaughan et al. (2019) and Raab and Laborde (2011) peoples' decision-making can be influenced by their sports careers. In this thesis we argue that it is not only sports in general that influences decision-making processes, but it is also the type of sport that plays a role. This research provides significant insights for elite athletes that transitioned into entrepreneurs by fostering an understanding of their decision-making processes, enabling them to reflect on their practices. This reflection will empower them to refine their decision-making strategies and adapt them to the demands of their ventures. This self-awareness lays the foundation for more informed and effective decision-making in their entrepreneurial careers, ultimately making it easier for them to deal with challenges and take advantage of opportunities. Furthermore, the findings of this thesis offer valuable insights that could help to support athletes transitioning into entrepreneurship. By understanding the unique needs and decision-making styles of athletes from individual and team sports backgrounds, tailored educational programs can be developed. These programs can provide assistance to athletes, which provides them with the necessary skills and knowledge to navigate the challenges of entrepreneurship more effectively.

## **5.3 Theoretical implications**

The findings of this study suggest that there is a clear difference in decision-making processes of elite team sport athletes and elite individual sport athletes during the early stages of their ventures. Through a qualitative research method, with interviews as data collection tool, this thesis builds upon previous research that studied the intersection between sports and entrepreneurship with the help of quantitative research methods, which allowed to identify certain patterns (Steinbrink et al. 2020; Steca et al. 2018; Nia & Besharat, 2010; Haski et al. 2024). Through a quantitative research method this study builds upon these patterns and enables a more in-depth understanding of how the decision-making processes of athlete-turned-entrepreneurs during the early stages of their ventures are impacted by their previously gained knowledge, their traits and their overall experience in their sports career.

More specifically, this study builds upon findings that suggest that people's decision-making processes are significantly impacted by their sports careers (Vaughan et al. 2019; Raab & Laborde 2011). The sports careers shape people in terms of skills, traits and thinking processes, which is dependent on different aspects of a sports career, for example the level on which the sport is practiced and the type of sports that was played, which ultimately shapes decision-making processes (Jacobson & Matthaeus, 2014; Vaughan et al. 2019; Laborde et al.

2016). Because elite athletes make use of their intuition, have quicker sensory processing and faster cognitive processing, they are able to make better and faster decisions (Raab & Laborde, 2011) compared to non- or lower level athletes. In this study it was shown that sports backgrounds indeed impact decision-making, aligning with findings of previous studies. However, this research further explains the underlying factors of this impact and explains in what way different sports backgrounds influence decision-making through factors like the assessment of risk, consideration of stakeholders and resilience.

Furthermore, significant differences were found in earlier research regarding personality traits when comparing individual sport athletes with team sport athletes (Laborde et al. 2016; Nia & Besharat, 2010). These differences were found to not only apply in a sports environment, but also in an environment outside sports (Jacobson & Matthaeus, 2014). In this thesis the effect of the differences in these traits on decision-making in early-stage ventures was explored. It was found that these traits, for example autonomy and agreeableness, influence aspects such as risk perception and external input, which consequently influences decision-making

Finally, while one stream of studies explored differences in personality characteristics among different types and levels of sport, the other focused on the effect of an (elite) athlete background on decision-making. However, the combination of these two elements was still unexplored, especially in an entrepreneurial context. This thesis filled this gap by using a qualitative approach in order to gain a more in-depth understanding of the differences between the groups and subsequently by exploring the impact of these differences on the decision-making processes in the early stages of their ventures.

## **5.4 Recommendations for future research**

Future research within this field can build on the key findings of this study, delving further into how risk perception, external input approaches, and adaptability influences decision-making within ventures founded by athletes. On the one hand, this study shows that individual athletes have a higher tolerance for risk and operate more independently. Further research into how these traits affect the success of a venture in the long-term could be interesting and could provide further insight into what athletes should consider when turning to entrepreneurship. On the other hand, the research shows that team sports opt for more collaborative decision-making and avoid risk to a greater extent. Seeing how this influences the success of a venture over time could be an area of interest for future research. Moreover, future studies could investigate the interplay between causation and effectuation, exploring if the preference for a certain decision-making process develops over time in a venture. This type of research would have a more



longitudinal approach to gain further insights into how decision-making processes develop over time from the moment of starting the venture to having a well-established firm. Another interesting research direction could for instance focus on comparing the level of sports experience (amateur vs professional) to understand how much sports experience is needed to influence decision-making in an entrepreneurial setting.

Recommendations for future research can not only be drawn from the findings but could also build upon the limitations of this study, considering alternative methodologies that can enhance the generalizability and understanding within this field. Due to the use of interpretivism and thematic analysis in this study there are limitations concerning the objectivity and reproducibility of the study. Hence, future research could use a mixed-methods approach, combining qualitative and quantitative findings to validate the findings. Future research could consider the sample size and diversity of cases, considering the range of sports selected and the industries the athletes founded their ventures in. This would mitigate the risk of overrepresentation of a certain sport or industry, which would lower the chances of industry or sport specific results. Random sampling from a larger pool of participants would be a way to address this limitation. Additionally, future research could focus on further categorizing the sports beyond team- and individual sports. Classifying athletes based on team size, aggression levels, and the nature of the sport, could help to more specifically identify which factors within individual- and team sports influence entrepreneurial decision-making.

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# Appendix A: Interview Guide

## Introduction

Welcome and thank you for joining us today. We are excited to have the opportunity to speak with you. Before we start, we would like to let you know that this meeting will be recorded for transcription purposes and will be deleted right after the transcription is finished. Also, everything told during this meeting is strictly confidential and will not be shared publicly without your consent. Do you agree with everything that has been said, and would you like to go on with this interview?

## Background

- Can you start by telling something about yourself?
- Can you tell me more about your sports background?
  - For how long have you played this sport?
  - At what level did you play
- Can you tell more about your business?
  - Why did you start a business?
  - In what industry did you start the business?
  - How long have you been in business for?
- Impact of sports on personal development/ developed traits
  - How did your sports experience impact you as a person?
  - What traits did you develop during your sports career?
- Why did you decide to shift careers from being an athlete to being an entrepreneur?
- Can you give an example of when something you learned in sports helped you in entrepreneurship?

## Decision-making

In the following questions we will focus on the first venture you were a part of as a founder.

- What were the most important decisions that had to be made in the early days of your venture?
  - How did those decisions impact the direction and growth of your venture in the long term?

- Can you walk us through how you approached making those critical early decisions and what factors did you consider?
- Did you make the decisions during your sports career on your own, with your team, or with external help?
  - In what way did they help you?
  - In what way did this help influence the decisions you made?
- Did you make the decisions during the early stages of your venture on your own, with your team, or with external help?
  - In what way did they help you?
  - In what way did this help influence the decisions you made?
- To what extent did your team influence the decisions you made during your sports career?
- To what extent did your team influence the decisions you made during the early stages of your venture?
- Did you feel any sense of responsibility for the decisions you had to make and its consequences during your sports career?
  - How did this impact the decisions you made?
- Did you feel any sense of responsibility for the decisions you had to make during the early stage of your venture?
  - How did this impact the decisions you made?
- How did you look at the possibility of failure as a result of your decisions during your sports career?
  - How did this impact the decisions you made?
- How did you look at the possibility of failure as a result of your decisions during the early stage of your venture?
  - How did this impact the decisions you made?

### **Challenges and setbacks**

- Can you tell me about the main challenges you faced during the early stages of venture creation?
  - What did you do to overcome these challenges?
  - Did you solve it on your own or did you look for help?
- Can you compare the way you handled challenges you had as an athlete to the way you handled the challenges you had as an entrepreneur in the early stages of your venture?

- How did you solve any lack in skills or knowledge that was needed to make a decision during your sports career?
- How did you solve any lack in skills or knowledge that was needed to make a decision during the early stage of your venture?
- Were you more focused on the resources you had and looked for what you could achieve with those or where you more focused on a specific goal and what you needed to get there during your sports career?
- Were you more focused on the resources you had and looked for what you could achieve with those or where you more focused on a specific goal and what you needed to get there during the early stages of your venture?

### **Outro**

Those were all the questions from my side, do you have any questions for me?

Then I want to thank you again for joining today and I wish you a great day!

## **Appendix B: Consent form**

The following points are important to know before going on with the interview.

- The interview will take approximately one hour.
- No risks are associated with taking part in this research.
- You have the right to withdraw from the interview whenever you wish.
- The interview will be recorded for transcription purposes and will be deleted right after the transcription is finished.
- Everything told during this meeting is strictly confidential and will not be shared publicly without your consent.
- A pseudonym will be used in place of your name.
- You are free to contact the researchers with any questions you may have.

Do you agree with everything that has been said, and would you like to go on with this interview?