Experience of venture capitalists influence the decision-making criteria

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This research marks the conclusion of my Master study in Business Administration at the University of Twente. Throughout this program, I specialized in the Entrepreneurship, Innovation & Strategy profile. My thesis focused on the subject of investment decisions. I ultimately, together with my supervisor, chose the topic of Venture Capital and decision-making criteria. This turned out to be a particularly interesting and educational subject, which led me to delve deeper into the world of venture capital and the complex decision-making processes involved.

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Abstract

Venture capital (VC) investment decisions are characterized by uncertainty and risk and require careful consideration of various criteria that affect the outcome. This study focuses on understanding how different types of prior experience shape VCs' decision-making criteria during the screening stage, particularly in the assessment of Product/Service, Market Competitiveness, Financial Performance, and Management Team criteria. This research aims to address a gap in understanding the relationship by examining how Industrial Market experience, Top Management experience, and Entrepreneurial experiences influence the weighting of decision criteria. Specifically, it examines the differences between investors with experience and those with no prior experience. Drawing upon cognitive schemas theory and signaling theory, this study aims to explore how investors assess signals and how experience influences the decision-making process. Employing a survey-based methodology and statistical analyses, the research reveals insights into the relationship between experience and decision-making criteria. The study reveals that Industrial Market experience and Top Management experience significantly influence decision criteria during deal screenings. Surprisingly, Entrepreneurial experience shows no significant difference in decision-making, challenging existing assumptions. Looking at the Industrial Market experience, the experienced group gives more importance to the Product/Service criteria and Financial Performance criteria compared to non-experienced investors. The difference is significant. With Top Management experience, the experienced group places greater emphasis on Financial Performance and the Management Team than the non-experienced group. The Top Management experience on Market Competitiveness criteria, the non-experienced group assigns more importance than the experienced group. The differences are significant. The study contributes to both academic and practical literature on VC decision-making by refining existing theories and offering new perspectives. Insights gained can inform training programs, recruitment strategies, and professional development initiatives within the VC industry. For entrepreneurs seeking VC support, understanding VCs' decision-making processes can facilitate alignment of pitches and strategies with investor priorities.

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1. Introduction

The field of entrepreneurial finance, particularly within the field of venture capital (VC), is characterized by high levels of uncertainty and risk (Capizzi, Croce, & Tenca, 2022). Successful VC investment decisions require careful consideration of various criteria that can impact investment outcomes (Portmann & Mlambo, 2013) (Jeong, Kim, Son, & Nam, 2020). However, the decision-making process of venture capitalists during the deal screening stage remains a topic of ongoing debate and investigation (Guenther, Özcan, & Sassmannshausen, 2022). One aspect that has received attention is the influence of venture capitalists' experience on the criteria they consider when evaluating potential investments (Casamatta & Haritchabalet, 2007). The decision process of venture capitalists (VCs) involves multiple stages, each playing a crucial role in the evaluation and selection of investment opportunities. In this research, particular attention will be given to the screening stage. The screening stage serves as the initial filter where venture capitalists assess potential investments based on predetermined criteria (Moritz, Diegel, Block, & Fisch, 2021) (Layman & Jang, 2018). This study aims to delve into this relationship and shed light on how different types of prior experience shape venture capitalists' decision-making criteria.

Understanding how VCs assess and prioritize criteria during deal screening is important for optimizing investment strategies (Kollmann & Kuckertz, 2010). Previous research found that VCs with practical experience are better prepared to make informed investment decisions (Gomper, Kovner, & Lerner, 2009). A study by Franke, Marc, Harhoff, & Henkel (2008) suggests that experienced individuals make different considerations in the choice of criteria than less experienced individuals. Despite the existing knowledge about the importance of experience in venture capital decision-making, there is still a gap in understanding how different types of prior experience influence the weighting of decision criteria during the deal screening stage (Petty & Gruber, 2011) (Moritz, Diegel, Block, & Fisch, 2021) (Nunes, Felix, & Pires, 2014). It is important to address this gap as it can provide valuable insights into the factors that drive venture capitalists' investment choices (Portmann & Mlambo, 2013), since more experienced VCs attracting more funds and negotiating better deals (Gomper, Kovner, & Lerner, 2009). Petty & Gruber (2011) acknowledge the importance of experience, but fail to provide a detailed exploration of how different types of prior experience impact the specific criteria considered during the deal screening stage. Moritz et al. (2021) research points out a gap in the knowledge about how experience of being an VCs influence the decision-making criteria, but not the prior experience of an investor. My research study aims to bridge the gap by conducting a detailed analysis of how different types of prior experience impact the weighting of specific criteria. Because prior experience influences deals made in the venture capital context (Gomper, Kovner, & Lerner, 2009), I want to investigate what choices these experienced

VCs make. It's not just about looking at the broad picture but delving into the details of how different types of experiences play a role in decision-making.

Previous research studies have explored various types of experience that venture capitalists can have, such as Industrial Market experience, Top Management experience, and Entrepreneurial experience (Miloud, Cabrol, & Aspelund, 2012). Industrial Market experience refers to knowledge gained from working within a specific industry, while Top Management experience relates to expertise in leading and managing organizations (Kim & Lee, 2022) (Zarutskie, 2010). On the other hand, Entrepreneurial experience refers to firsthand experience in starting or managing a startup venture (Glücksman, 2020). Therefore, the research question addressed in this study is as follows:

How do different types of experience influence the importance of Venture Capital decision criteria during the deal screening stage?

Based on this research question, two sub-questions are made. These are:

1. How do venture capitalists' Industrial Market experience, Top Management experience, and Entrepreneurial experience differ in their influence on decision criteria during the deal screening stage?
2. What are the specific decision-making criteria that venture capitalists prioritize during the deal screening stage?

The main motivation for investigating this relationship arises from the recognition that experience in venture capital is associated with making more well-informed investment decisions. As venture capitalists progress through the deal screening stage, their ability to assess and prioritize specific criteria becomes crucial in shaping investment outcomes. Understanding the relationship of how different experiences shape decision-making processes can inform training programs, recruitment strategies, and professional development initiatives within the venture capital industry. This knowledge can ultimately enhance the effectiveness and success rates of investment decisions, leading to improved performance and outcomes for venture capital firms and their portfolios.

The theoretical framework for this study draws upon previous research on the cognitive theory of cognitive schemas and it relies on signaling theory. When VCs evaluate a proposal, each VCs considers various decision-making criteria. Research by Franke, Marc, Harhoff, & Henkel (2008) indicates that cognitive structures can influence how a VCs makes choices during proposal evaluation. Cognitive schemas are mental structures comprised of knowledge and/or experiences that individuals use to organize and interpret information. Studies demonstrate that an individual's schemas can change over time (Prietula & Simon, 1989). Another theory aligned with understanding the choices VCs make during

proposal evaluation is signaling theory. In this context, two parties have access to information. These are the sender and the receiver (Connelly, Trevis Certo, Duane Ireland, & Reutzel, 2011). VCs assess the signals given by the entrepreneur/founder. This research explores how VCs assess perceived signals and how prior experiences influence the decision-making process in the screening stage.

To investigate this research question, a survey-based methodology is employed. To analyze the relationships between the levels of experience and decision-making criteria, the independent sample t-test and the nonparametric Mann-Whitney U test are applied. These tests assess specific differences between the means of two groups, offering detailed insights into the impact of individual experiences on decision-making criteria (Kim T. K., 2015). For a more comprehensive exploration of the data, an ANCOVA analysis is conducted. This analysis will test the control variables of this study.

In the exploration of the first hypothesis, which investigated the impact of Industrial Market experience on the focus given to Product/Service criteria and Management Competitive criteria group. For the Product/Service group it was found that VCs with more experience in the industrial market significantly assigned a higher score (average of 4,048) compared to their less experienced counterparts (average of 3.4). For the Market Competitive group, there were no significant differences between the experienced and the non-experienced groups. Moving to the second hypothesis, examining the influence of Top Management experience on the weighting of Management Team criteria, it was observed that VCs with more Top Management experience indeed significantly assigned a higher score (average of 4.319) compared to those without such experience (average of 3.773). Lastly, the third hypothesis explored the impact of Entrepreneurial experience on the significance given to Financial Performance criteria. The results indicated that VCs with Entrepreneurial experience scored slightly higher on financial aspects (0.1146), but the p-values from both tests were higher than 0.05, suggesting no significant difference between the experienced and inexperienced groups. This implies that Entrepreneurial experience does not significantly influence the weighting of Financial Performance criteria among VCs.

This study aims to make several contributions to academic and practical literature on venture capital decision-making. The study's findings improve existing theories about decision-making in venture capital. Apart from refining these existing theories, the study also aims to bring in new perspectives that go beyond the current ideas about how decisions are made in venture capital. By looking at how different experiences affect decision criteria, the study might reveal new factors that current theories don't fully cover. Understanding the impact of experience on decision-making can increase understanding of the venture capital industry's dynamics and offer informed guidance for venture

capitalists and entrepreneurs (Robb & Robinson, 2010). Insights from this research can directly inform and enhance the decision-making strategies of venture capitalists (Kollmann & Kuckertz, 2010). Understanding how different experiences shape the weighting of decision criteria allows venture capitalists to refine their approaches, leading to more informed and effective investment decisions. As a result of this study, a venture capitalist without prior experience will gain insights into the criteria on which he/she should focus. On the other hand, too much experience can result in confirmation bias and overlooking new innovative opportunities (Shepherd, Zacharakis, & Bardon, 2003). For entrepreneurs in search of venture capital support can gain a clearer understanding of the decision-making processes employed by venture capitalists. The study's findings can provide entrepreneurs with insights into the factors that are likely to influence investment decisions. This allows them to match their pitches and strategies to the preferences and priorities of potential investors (Andrade, Pinheiro, Carvalho, & Rocha, 2022). Additionally, the findings contribute to a deeper understanding of the screening stage and offer insights into the early stages of the venture capital decision-making process (Guenther, Özcan, & Sassmannshausen, 2022).

The thesis will be structured as follows: Chapter 2 will review the relevant literature on venture capital decision-making, presenting three hypotheses derived from the literature. Chapter 3 will outline the research methodology employed in this study, including data collection methods and analysis techniques. Chapter 4 will then present the results of the research study along with the data analysis. Moving forward, Chapter 5 will provide a conclusion, and Chapter 6 will offer a discussion. Subsequently, Chapter 7 will address the limitations of this research and suggest areas for future research.

2. Literature review and hypothesis development

Chapter 2 provides a comprehensive literature review to facilitate a deeper understanding of the subjects related to Venture Capital decision-making. Through an extensive review of relevant articles, three hypotheses are developed. Furthermore, a conceptual model has been formulated based on the findings from the reviewed literature.

2.1 Literature review

The literature review presented in table 1 summarizes previous research on Venture Capital decision-making. The table includes information on sample size, the number of investment criteria, the number of groups into which the criteria are divided, and the methodology used for data collection. The papers presented in table 1 reveal limitations related to sample size. Many papers claim to have achieved a response rate of over 80%. For instance, Nunes, Felix & Pires (2014) reported sending questionnaires to 22 VCs and receiving 20 responses, resulting in a high response rate of 90.1%. However, the results may not be generalizable to the broader population. Portmann & Mlambo (2013) note that a low response rate is not uncommon in economic studies due to challenges in engaging professional populations. Several studies relied on small sample sizes (Kakati, 2003) (Zacharakis & Meyer, 2000) (Shepherd, Zacharakis, & Bardon, 2003). This suggests that the findings should be interpreted with caution due to potential limitations in broad generalizability. The studies often indicate that the sample size matches the number of samples from previous studies. Regardless, it is challenging to statistically detect differences among various groups due to the limited variability in the sample sizes (Svetek, 2023). My study includes 108 respondents, with 100 questionnaires being fully completed. This respondent count is consistent with previous research studies.

The assessment of decision criteria has not changed much over the years. According to Robinson (1987), venture capitalists are becoming more diverse in their approach to making investments. Robinson notes significant differences in the origin of equity capital, a wide range of different resources, varying investment stages, and differences in the minimum size of investments (financial aspects). Despite this differentiation, venture capitalists tend to remain almost uniform in their basic criteria when considering investment proposals. Table 1 shows different numbers of investment criteria. In this research, 20 criteria will be used based on previous resources. The literature consistently emphasizes four key groups of criteria considered by venture capitalists. These are Product/Service Evaluation, Market/Competitive Analysis, Financial Performance/Potential Return, and Management Team (Portmann & Mlambo, 2013) (Deventer & Mlambo, 2008) (Zacharakis & Meyer, 2000) (Macmillian, Zemann, & Subbanarasimha, 1987). These groups are also used in this research.

	(Macmillian, Zemann, & Subbanarasimha, 1987)	(Robinson, 1987)	(Muzyka, Birley, & Leleux, 1996)	(Zacharakis & Meyer, 2000)	(Shepherd, Ettenson, & Crouch, 2000)	(Shepherd, Zacharakis, & Baron, 2003)	(Kakati, 2003)	(Mason & Stark, 2004)	(Deventer & Mlambo, 2008)	(Kollmann & Kuckertz, 2010)	(Petty & Gruber, 2011)	(Portmann & Mlambo, 2013)	(Nunes, Felix, & Pires, 2014)	(Widyanto , Dalimunthe, & Triono, 2021)	(Seong & Kim, 2021)	(Svetek, 2023)
Sample size	67	53	73	53	64	66	27	10	16	81	3631 (deals)	26	22	19	30	86
Number of investment criteria	25	/	35	/	8	/	38	9	31	15	/	54	45	12	19	/
Amount of groups decision-making criteria	4	/	/	/	/	/	6	/	4	/	9	4	6	4	4	/
Data gathering method																
Interviews													x	x		
Questionnaire/survey	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x
Database											x					
Observation			x													

Table 1. Literature review on VC decision-making (sample size, number of investment criteria, amount of groups decision-making criteria, data gathering method).

	(Mason & Stark, 2004)	(Franke, Gruber, Harhoff, & Henkel, 2006)	(Franke N. , Gruber, Harhoff, & Henkel, 2008)	(Walske & Zacharakis, 2009)	(Gompers, Kovner, & Lerner, 2009)	(Dimov. & Martin de Holan, 2010).	(Zarutskie, 2010)
Sample size	10	51	51	172	3518	4446	222
Experience type							
Industrial Market Experience	x	x	x		x	x	
Top management Experience	x	x	x	x			x
Entrepreneurial Experience		x	x	x			
Data gathering method							
Interviews			x				
Questionnaire/survey	x	x	x				
Experiment		x					
Database				x	x	x	x
Observation							

Table 2. Literature review on prior experience venture capitalist (sample size, experience type, data gathering method).

Some papers also explore the duration of time individuals have spent as venture capitalists. For instance, Seong & Kim (2021) examine the experience of venture capitalists, with a specific focus on the duration of their role as VCs, as also discussed by Macmillian, Zemann, & Subbanarasimha (1987). However, this research will specifically investigate the type of experience an investor has before becoming a venture capitalist. Table 1 also indicates that most studies used a questionnaire/survey as a data gathering method, which will also be employed in this research study.

Table 2 provides a literature review that focuses on the role of prior experience of the venture capitalist. This table examines the experience of venture capitalists before entering the venture capital industry. Only a few papers explore the specific role of past experience in the venture capital decision-making process. Some studies, such as those by Miloud, Cabrol, & Aspelund (2012), categorize experience into three groups: Industrial Market experience, Top Management experience, and Entrepreneurial experience. These categories frequently appear in papers discussing how past experience influences venture capital decisions. These different forms of experience are also used in this research. The data gathering methods in table 2 show that most studies with high sample sizes use information obtained from databases. Studies with low sample sizes use questionnaires as their data gathering method. Similar to the results presented in table 1, detecting statistical differences among various groups proves challenging (Svetek, 2023).

2.2. Theoretical background

The theoretical background delves into the screening stage of venture capitalist decision-making and exploring key decision criteria groups: Product/Service evaluation, Market/Competitive analysis, Financial Performance, and Management Team. Additionally, it covers various types of experience, including Industrial Market experience, Top Management experience, and Entrepreneurial experience. Tables 3, 4, and 6 provide descriptions of articles that contain important information for this research. The hypotheses are based on the academic articles, which were found from different databases. The databases which were used are Scopus, ScienceDirect, Web of Science, and Google Scholar.

2.2.1. Venture Capitalists and investment process (focus on Screening Stage)

This paragraph provides a brief explanation of the specific stage in the investment process that will be the focus of this research. Following this, the decision criteria theory and the theory of experience someone has will be explained. Table 3 displays the main articles related to the research study, emphasizing the key construct 'Venture Capital.' These articles offer general insights into venture capital and the investment process. Initially, a selection of sources was made based on the search terms used. The search terms used include Venture Capital, Investment Process, Decision-Making

Process, and Screening Stage. Subsequently, the relevance of the topic, actuality, and the depth of insight into the decision-making process were considered. Given that this research study focuses on the screening stage, I also assessed whether the selected articles prominently address this particular stage of the decision-making process.

Sources	Key construct	Research design	Main findings
(Layman & Jang, 2018)	Venture Capital	This paper explores VC evaluation and screening processes, aiming to uncover the stages, activities, and decision-making criteria used for assessing startups.	Describe and explain the different stages of the decision process of the VC. The stages are deal origination, deal screening, deal evaluation and structuring.
(Moritz, Diegel, Block, & Fisch, 2021)	Venture Capital	This paper assesses the impact of VC investors' education and experience on their screening decisions when evaluating potential investee candidates.	The study reveals that the education and experience of VC decision-makers shape their preferences in evaluating potential investees. Experienced VC investors prioritize the management team, emphasizing their capabilities in screening decisions.
(Gompers, Gornall, Kaplan, & Strebulaev, 2020)	Venture Capital	This paper provided insights about VC's investment process, including pre-investment screening, structuring investments, and post-investment stage.	Describe and explain different stages of VC decision-making process and how to they create value in the investment's choice. This paper found that VCs considered the characteristics of management team important when selecting investments.
(Jeong, Kim, Son, & Nam, 2020)	Venture Capital	The study aims to examine how VC investment impacts the sustainable growth and performance of startup firms.	Early-stage VC investment positively impacts the sustainable growth and performance of startups, particularly those capable of absorbing and applying new knowledge and resources.

Table 3. Most important academic articles whit key construct Venture Capital. Articles were selected primarily based on search terms, topic relevance and actuality.

Theoretical background

Venture capital represents a form of private equity investment that offers financial backing to high-growth companies with potential for returns (Wallmeroth, Wirtz, & Groh, 2017) (Robinson, 1987). The provision of both financial capital and strategic support by venture capital serves to bridge the gap, enabling companies to achieve their growth objectives (Jeong, Kim, Son, & Nam, 2020). Such investments are critical for startups that lack essential assets and face an uncertain future (Huang & Madhaven, 2021). The execution of a venture capital investment require specialized skills, knowledge, and time to effectively select the company in which the venture capital is invested, along with providing relevant advice (Jackson, Bates, & Bradford, 2012) (Buchner, Mohamed, & Schwienbacher, 2017). Unlike debt-based financing, venture capital investments primarily take the form of equity investments. Investing in an early-stage venture typically proceeds higher returns compared to investing in a later-stage venture (Cumming, Kumar, Lim, & Pandey, 2022).

The decision-making process of venture capital encompasses several interconnected stages that enable venture capitalists to identify, evaluate, and ultimately invest in high-potential start-ups. These stages generally include deal sourcing, screening, evaluation, and structuring (Layman & Jang, 2018). Deal sourcing refers to the proactive search for potential investment opportunities through various channels, such as networks and industry conferences. Once a pool of potential investments is identified, the screening stage begins. During this stage, Venture Capitalist (VCs) conduct an analysis of each opportunity to measure its fit with their investment strategy, risk profile, and desired return on investment (due diligence). The screening process helps filter out investments that do not meet the predetermined criteria (Gompers, Gornall, Kaplan, & Strebulaev, 2020) (Moritz, Diegel, Block, & Fisch, 2021). The focus of this research study will be on the screening stage. After the screening stage, the evaluation phase focuses on conducting a detailed valuation analysis and a more objective observation of the investment opportunity. The final element of the decision-making process in venture capital is structuring the investment. This stage involves discussions and negotiations between the VCs and the entrepreneur or founding team on various aspects, such as the amount of capital to be invested and the ownership stake or share of the investor (Treville, Petty, & Wager, 2014). Figure 1 shows the decision-making process of VCs with the focus on screening.

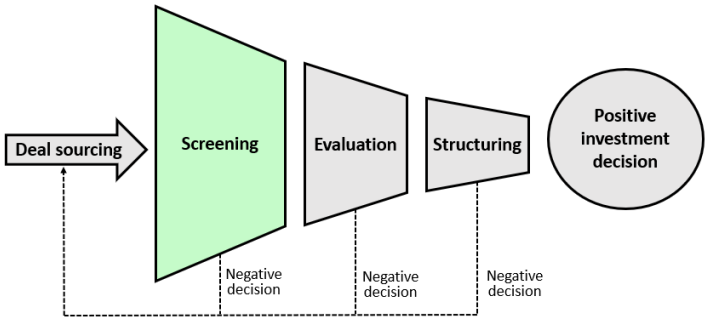

Figure 1. Decision-making process of Venture Capitalists (Layman & Jang, 2018), this research focus on screening stage.

2.2.2. Venture Capitalists decision-making criteria

Table 4 displays the main articles related to the research study, focusing on the key construct of decision-making criteria. Initially, a selection of sources was made based on the search terms used. The primary search terms include Venture Capital, Decision-Making Criteria, Investment Criteria, and Evaluation Criteria. Subsequently, the relevance and actuality of the article, as well as its methodology's alignment with my study, and the depth of insight into the decision-making criteria, were considered. Additionally, various perspectives of criteria groups were examined when venture capitalists make choices in the screening phase. This resulted in obtaining a broad range of insights.

Sources	Key construct	Research design	Main findings
(Deventer & Mlambo, 2008)	Decision-making criteria	This paper investigates investment criteria of VCs used in the screening stage. They use a 5-point Likert Scale questionnaire. The criteria groups	The entrepreneur and management team are the most important category of criteria when evaluating new projects for investments. The findings highlight the

		are: management, product, financial, and market.	importance of the factors such as the entrepreneur´s honesty and integrity.
(Kaplan & Strömberg, 2000)	Decision-making criteria	This paper investigates the venture capital investment decision-making process, specially focus on how VCs choose and screen their investments.	The key findings indicate that VCs typically assess investment opportunities based on three factors: the opportunity's attractiveness (market size, technology, customer adoption, and competition), the management team's capabilities to execute the business plan, and the financial terms of the deal.
(Portmann & Mlambo, 2013)	Decision-making criteria	This paper investigate how VC firms and private equity assess investment opportunities. Using 5-point Likert Scale. Criteria groups: management, product, financial, and market.	VC firms consider the entrepreneur or management team as the most critical criterion when assessing investment opportunities. This highlights the important role of the management team in influencing investment decisions.
(Nunes, Felix, & Pires, 2014)	Decision-making criteria	This paper investigates investment decisions of Portuguese VCs. They used the criteria category: entrepreneur and management team, market, product, and financial aspects criteria.	VCs prefer good personality of the entrepreneur and management team criteria. Further research study may be on the personality or experience of the VCs.
(Zacharakis & Meyer, 2000)	Decision-making criteria	This paper displays the potential of actuarial decision models. They use four categories. VCs based their decision on: entrepreneur/team, product/service, market/competitive, potential returns. They used a seven-point Likert Scale.	More information hinders the VCs decision process. The VCs prefer more information than less information, but it increase the complexity. The researchers find that there are challenges in the screening process, leading to a need for refinement of the criteria used by the VCs.
(Petty & Gruber, 2011)	Decision-making criteria	This paper investigates VC decision-making process. They studied four major categories of criteria: product/service, target market, financial potential, and management team.	The study reveals insights into how decision-making criteria evolve and vary across different stages of the evaluation process. Findings contribute to deeper understanding of the criteria of VC decision-making in real-world setting. Future research could be on much more detail of the role of experience in VC decision-making.

Table 4. Most important academic articles whit key construct decision-making criteria. Articles were selected primarily based on search terms, methodology, diversity of perspective, topic relevance and actuality.

Theoretical background

As mentioned previously, in this research study, four groups of criteria will be explored: Product/Service Evaluation, Market/Competitive Analysis, Financial Performance/Potential Return, and Management Team (Portmann & Mlambo, 2013) (Deventer & Mlambo, 2008) (Zacharakis & Meyer, 2000) (Macmillian, Zemann, & Subbanarasimha, 1987). Some studies have utilized more than four groups in which decision-making criteria emerge. For instance, Katai (2003) introduced resource-based capability criteria and divided market and competitive up in to two groups. Nuanes, Felix & Pires (2014) further subdivided the management team into two groups named personality entrepreneur and experience entrepreneurs. They also included a group named 'other aspects,' covering criteria such as economic scale and VCs intuition. The decision to focus on four groups in this study is because of the need to avoid overlap within the criteria groups.

Macmillian, Zemann, & Subbanarismha (1987) suggest that instead of evaluating each criterion individually, venture capitalists should consider a combination of criteria. Some researchers use Conjoint Analysis for this purpose. The analysis is complex because it requires creating and identifying profiles of specific characteristics (attributes) of investment opportunities, along with different levels of each attribute (Svetek, 2023) (Kollmann & Kuckertz, 2010). Another approach involves using predetermined criteria, where statistical analyses help draw conclusions (Portmann & Mlambo, 2013). Respondents then provide ratings based on these criteria. This method is useful when aiming to measure specific aspects of investment opportunities without dealing with the complexities of conjoint analysis. In this research study, I investigate how prior experience influences decision-making criteria. Therefore, instead of using Conjoint Analysis, I employ predetermined criteria. This allows for a more effective assessment of the influence of experience. The criteria to be rated by respondents are listed in table 5.

Decision-making criteria	**Group criteria**	**Source**
The uniqueness and technological innovation of the product/service	Product/service	(Nunes, Felix, & Pires, 2014)
The scalability and growth potential	Product/service	(Portmann & Mlambo, 2013)
The product/service includes quality, standards and performance	Product/service	(Mason & Stark, 2004)
The level of intellectual property protection	Product/service	(Nunes, Felix, & Pires, 2014)
The alignment of the product/service with current market trends	Product/service	(Nunes, Felix, & Pires, 2014)
The level of competition within the target market	Market/Competitive	(Mason & Stark, 2004)
The market positioning and differentiation strategies in comparison to competitors.	Market/Competitive	(Mason & Stark, 2004)
The analysis of potential market barriers and entry challenges	Market/Competitive	(Nunes, Felix, & Pires, 2014)
The assessment of market trends and future projections	Market/Competitive	(Nunes, Felix, & Pires, 2014)
The assessment of the market size	Market/Competitive	(Widyanto , Dalimunthe, & Triono, 2021)
The profitability and margin potential of the venture	Financial Performance	(Widyanto , Dalimunthe, & Triono, 2021)
The venture will ensure a return on investment	Financial Performance	(Nunes, Felix, & Pires, 2014)
The assessment of the growth potential of the venture	Financial Performance	(Portmann & Mlambo, 2013)
There will be no follow-up investment required	Financial Performance	(Portmann & Mlambo, 2013)
The investment will require low monitoring and administration costs	Financial Performance	(Portmann & Mlambo, 2013)
The venture's team has a successful track record	Management Team	(Portmann & Mlambo, 2013)
The entrepreneur or venture possesses excellent management and leadership skills/experience.	Management Team	(Widyanto , Dalimunthe, & Triono, 2021)
The management team offers reports and feedback on performance.	Management Team	(Portmann & Mlambo, 2013)
The management team possesses good knowledge of the sector.	Management Team	(Nunes, Felix, & Pires, 2014)
The management operates with honesty and integrity.	Management Team	(Portmann & Mlambo, 2013)

Table 5. List of decision-making criteria VC (criteria, group of the criteria and the source)

The criteria are subdivided into 4 groups based on previous studies, which are explained below:

Product/Service: Venture capitalists assess the uniqueness, innovation, market fit, and alignment with the current market trend of the product or service. This assessment encompasses an analysis of the product or service's scalability, intellectual property protection, technology differentiation, and potential for disruptive impact (Kakati, 2003) (Nunes, Felix, & Pires, 2014). Assessing how well a product/service fits the market's need and demand is important because a strong market fit indicates a higher likelihood of customer adoption and a better competitive position for the company (Kaplan & Strömberg, 2000). If venture capitalists recognize that technological differentiation provides a competitive advantage and increased growth opportunities, this criterion may receive a high ranking in their decision-making process (Cox, Lortie, & Gramm, 2017) (Mason & Stark, 2004).

Market/Competitive: A thorough evaluation of the target market size, growth rate, trends, and dynamics is conducted to determine company opportunities. A sizable market opportunity offers room for growth and profitability for a company (Kaplan & Strömberg, 2000). In addition, they critically evaluate the competitive positioning of the company, encompassing its unique value proposition, competitive advantages, and barriers to entry (Riquelme & Watson, 2002). A strong competitive positioning can lead to sustainable growth and market dominance (Kaplan & Strömberg, 2000) (Mason & Stark, 2004).

Financial Performance: Venture capitalists precisely examine financial projections, growth potential, profitability, follow-up investment required, and return on investment expectations (Allen & Hevert, 2007) (Portmann & Mlambo, 2013). The primary objective is to identify companies' substantial growth potential and a high likelihood of attaining significant returns on the venture capitalist's investment (Kollmann & Kuckertz, 2010). Venture capitalists factor this criterion into their decision-making process because having a clear path to generating profits is important. By carefully assessing financial performance and potential return, VCs aim to make informed investment choices that align with their financial objectives and maximize the likelihood of achieving substantial returns (Nunes, Felix, & Pires, 2014).

Management Team: This evaluation includes assessing the skills, experience, and effectiveness of the founders and key executives in executing business plans (Deventer & Mlambo, 2008). Effective execution of the business plan is important for achieving the company's goals (Kaplan & Strömberg, 2004). This is why VCs measure the performance of the management team. VCs evaluate the team's past achievements, track record, ability to build and manage relationships, and overall commitment to the venture's success (Gompers, Gornall, Kaplan, & Strebulaev, 2020).

2.2.3. Experience of the Venture Capitalist

Table 6 displays the primary articles associated with the research study, focusing on the key construct of the experience of venture capitalists. The search terms for this segment of the study include Venture Capital and experience. Subsequently, the relevance and actuality of the article, and the depth of insight into the prior experience of venture capital were considered. To create diversity of perspectives, efforts were made to explore various experiences. Later, the focus was narrowed down to three different types of experiences.

Sources	Key construct	Research design	Main findings
(Franke, Marc, Harhoff, & Henkel, 2008)	Prior experience of the VCs	This paper is drawing on cognitive theory and shows the differences between prior experience of VCs and a VCs without this experience.	The study suggests that experienced individuals make different considerations in choice criteria than less experienced individuals. External factors, in this case experience, influence decision-making at the individual level. Therefore, the concept of experience is applicable to how VCs make choices
(Gomper, Kovner, & Lerner, 2009)	Prior experience of the VCs	This study compares VCs experiences in relationship with decision-making processes. The study particularly focuses on the degree of specialization by individual venture capitalists within a firm.	VCs with practical expertise are better prepared to make informed investment decisions, translating their theoretical understanding into practical actions, attracting more funds, and negotiating better deals
(Walske & Zacharakis, 2009)	Prior experience of the VCs (top management)	This paper investigates the prior experience of the VCs and if this has an impact on the level of successful investment. They looked at different experience for example the industry experience.	Main finding is that senior management and consulting experience contribute to the firm success. VCs with this background bring valuable skills to the industry. Entrepreneurial experience has a negative impact.
(Miloud, Cabrol, & Aspelund, 2012)	Experience	This study investigates factors that influence venture capitalists' valuation of new ventures. The framework contains concepts from strategic management which are important for the firm performance.	Describe three experience forms: industrial experience (consider industry dynamics), top management experience (knowledge gained from managing), and other entrepreneurial experience (knowledge of starting a venture).

Table 6. Most important academic articles whit key construct experience of the VCs. Articles were selected primarily based on search terms, diversity of perspective, topic relevance and actuality.

Theoretical background

Experience means having performed various tasks multiple times. A prior study by Prietula & Simon (1989) suggests that diverse levels of experience don't necessarily result in quicker decision-making. Instead, they enable individuals to compare the meaning of different patterns. This cognitive process involves understanding and interpreting our experiences (Prietula & Simon, 1989). Building on cognitive theory, Franke's study (2008) argues that thought patterns are refined as individuals gain experience in various ways. The study suggests that experienced individuals make different considerations in choice criteria than less experienced individuals. External factors, in this case

experience, influence decision-making at the individual level. Therefore, the concept of experience is applicable to how VCs make choices (Franke, Marc, Harhoff, & Henkel, 2008). This makes experience theory interesting for further development in VC decision-making. Some studies investigate the experience of working as a VC investor. Bacon-Gerasymenko's study (2019) suggests that learning from recent success is more beneficial than learning from experience in the past. If venture capitalists rely too much on old experiences, it can lead to poor investment choices. Still there is not a lot of written about how prior experience of the VCs influence the outcome of their investment (see table 2 about literature review, prior experience). Simultaneously, many studies highlight a gap in the literature concerning how various types of prior experience influence decision-making criteria during the screening stage (Petty & Gruber, 2011) (Moritz, Diegel, Block, & Fisch, 2021) (Sharma, 2006).

Experience gained through active involvement in various markets promotes practical expertise, allowing investors to apply theoretical knowledge to real-world scenarios (Rengifo & Trifan, 2007). VCs with practical expertise are better prepared to make informed investment decisions, translating their theoretical understanding into practical actions, attracting more funds, and negotiating better deals (Gomper, Kovner, & Lerner, 2009). Experience can have both positive and negative outcomes on investments. While increasing experience is initially associated with improved decision-making, there comes a point where further experience may lead to reduced reliability and performance in investment decisions. Too much experience can result in confirmation bias and overlooking new innovative opportunities (Shepherd, Zacharakis, & Bardon, 2003). As mentioned earlier, many research studies focus on the experience of being a VC investor rather than looking at the experience before someone becomes a VCs. From previous studies on experience and studies on prior experience in the venture capital perspective, three different types of experience can be summarized: Industrial Market Experience, Top Management Experience, and startup or other Entrepreneurial Experience (Miloud, Cabrol, & Aspelund, 2012) (Morawczynski, 2020) (Franke N. , Gruber, Harhoff, & Henkel, 2006).

The three different perspectives on experience are explained below.

Industrial Market experience: Industrial market experience refers to specialized knowledge of specific sectors, markets or industries in which an VCs has worked (Franke N. , Gruber, Harhoff, & Henkel, 2006) (Franke N. , Gruber, Harhoff, & Henkel, 2008). This experience is seen as prior knowledge to minimize investment risk. Due to this prior experience, investors tend to invest in industries or markets where they already have extensive knowledge (Mason & Stark, 2004). When overall investing activity in an industry increase, VCs with more experience in that sector tend to invest more. Even though these experienced VCs invest more, it doesn't harm the success of their investments (Gomper, Kovner, & Lerner, 2009). VCs with a deeper understanding of an industry can better screen and select

startups that align with the specific industry's needs and potential. This increasing the chances of success of the investment (Dimov. & Martin de Holan, 2010).

Top Management experience: VCs with a lot of management experience are strongly influenced by background and experience at the time of making an investment (Mason & Stark, 2004). They use this knowledge to minimize investment risks. A VC with this experience knows that capable leadership can direct a company towards its goals (Miloud, Cabrol, & Aspelund, 2012). Zarutskie (2010) highlights that investment funds perform better when VCs have prior experience in managing companies. The study suggests that VCs with experience in management likely acquire skills necessary for running a fund through trial and error, a learning process less likely obtained elsewhere. VCs with this experience can identify startups with strong strategic plans and decision strategies, which have a positive effect on the success of a company (Zarutskie, 2010). Their experience in managing a company has an impact on the decision-making process because they know that the operational aspects of running a business are important for the success of a company (Walske & Zacharakis, 2009).

Entrepreneurial experience: Entrepreneurial experience, particularly experience as a founder or operator of a startup, is another influential factor in venture capital decision-making. A previous study by Franke, et al (2006) and Franke, et (2008) says that the time a person has spent as an entrepreneur and gained knowledge can be important when investing. This is because they know what characteristics a business needs to grow into a successful business. VCs who have themselves been entrepreneurs can empathize with the challenges faced by startup founders and offer relevant guidance and support. This is especially with financially successful experience (Hsu, 2007). Their understanding of a business model and knowledge of effective strategies can improve the selection of entrepreneurial ventures/startups (Glücksman, 2020). This is because they learned from real-world success and failures and what effect this has on a company. Their experience in navigating the challenges faced by entrepreneurs allows them to assess investment opportunities from the perspective of a founder, leading to criteria that align with the needs of startups (Walske & Zacharakis, 2009) (Zhang, 2011).

2.3. Research hypothesis

The objective of this research study is to determine which form of experience has impact on the criteria used to evaluate proposals during the screening stage of potential investments. The above literature limited the criteria into four separate groups, namely Product/Service, Market/Competitive, Financial Performance, and Management Team. Within this literature, an investigation is conducted to determine which criteria group was regarded as the most crucial among the various types of experiences examined.

2.3.1. Hypothesis 1: Industrial Market experience VCs

Industrial market experience refers to specialized knowledge of specific sectors, markets or industries in which an VCs has worked. For instance, if a startup operates in the technology sector, a VC with industry experience in technology would possess familiarity within that specific industry. As highlighted by Gompers, Kovner, Lerner, and Scharfstein (2005), venture capitalists with extensive industry experience demonstrate increased sensitivity to market investment opportunities. This increased understanding allows VCs to better screen and select startups aligning with specific industry needs, consequently improving of the likelihood of investment success (Dimov. & Martin de Holan, 2010)**.** This is attributed to the fact that Industrial Market experience provides individuals with in-depth knowledge of the industry's dynamics, customer behavior, and market trends (Abell & Nisar, 2007). Furthermore, it enables more precise evaluations of the technical feasibility and market potential of a product or service (Seong & Kim, 2021). Building upon prior research, the following hypotheses are formulated:

Hypothesis 1a: VCs with more Industrial Market experience will put a stronger weighting on Product/Service criteria compared to VC's that lack this experience.

Hypothesis 1b: VCs with more Industrial Market experience will put a stronger weighting on Market/ Competitive criteria compared to VC's that lack this experience.

These hypotheses suggest that VCs with Industrial Market experience are likely to prioritize factors related to a venture's product or service and market competitiveness. Although Industrial Market experience is valuable for assessing product/service and market advantage (Hopp, 2010), its influence may be less pronounced in evaluating financial performance or the quality of the management team (Siegel, Siegel, & Macmillan, 1993) (Ismail & Medhat, 2019).

2.3.2. Hypothesis 2: Top Management experience VCs

The second hypothesis explores the influence of Top Management experience on VCs. According to Nikolaus, Gruber, Dietmar, & Henkel (2008), VCs with a background in leading and overseeing teams assign greater significance to factors such as leadership skills and the ability to implement business strategies within the management team group. Additionally, studies by Zarutskie (2010) indicate that VCs with management experience achieve higher exit rates compared to those lacking such experience, attributing this to their understanding of operational insights contributing to effective decision-making. According to Franke et al. (2006), VCs who themselves have been managers within companies tend to prioritize evaluating the team and the background of the entrepreneurs. Consequently, their expertise influences decision-making criteria related to management and organizational behavior (Dimov,

Shepherd, & Sutcliffe, 2007). Experience in managing a startup can aid venture capital fund managers in assessing good managers and assisting companies in selecting managers after investments (Zarutskie, 2010). Building upon prior research, the following hypothesis is formulated:

Hypothesis 2: VCs with more Top Management experience will assign greater weight to Management Team criteria compared to VCs that lack this experience.

This hypothesis suggests that venture capitalists with Top Management experience will prioritize factors related to the quality and competence of the management team when evaluating investment opportunities. It is expected that, due to their experience, they will consider the entrepreneur's past success, integrity, and expertise (Walske & Zacharakis, 2009) (Ismail & Medhat, 2019).

2.3.3. Hypothesis 3: Entrepreneurial experience VCs

The third hypothesis explores the influence of Entrepreneurial experience. Entrepreneurial experience refers to the knowledge, skills, and expertise gained through starting, managing, or owning a business venture (Franke N. , Gruber, Harhoff, & Henkel, 2006) (Franke, Marc, Harhoff, & Henkel, 2008). Individuals with Entrepreneurial experience have firsthand exposure to the challenges, risks, and opportunities associated with launching and growing a business (Zhang, 2011). According to Hsu (2007), VCs with Entrepreneurial experience will place more value on financial criteria. They possess an understanding of financial management and risk assessment shaped by their entrepreneurial endeavors. Another study by Franke, Guber, Harhoff, & Henkel (2006) and Franke et al. (2008) states that the time a person has spent as an entrepreneur and gained knowledge can be important when investing. This is because they know what characteristics a business needs to grow into a successful venture. A person with Entrepreneurial experience possesses a long-term perspective when it comes to financial strategy (Seong & Kim, 2021) (Walske & Zacharakis, 2009). Building upon prior research, the following hypothesis is formulated:

Hypothesis 3: VCs with more Entrepreneurial experience will assign greater weight to Financial Performance criteria compared to VCs that lack this experience.

The hypothesis suggests that Entrepreneurial experience significantly influences decision-making criteria, particularly in the financial performance group. Their firsthand knowledge of the challenges and requirements for building a successful venture may lead them to place greater importance on financial indicators such as revenue growth, profitability, and return on investment (Glücksman, 2020). This is because Entrepreneurial experience provides VCs more insights into what works for a company

in terms of generating revenue (Hsu, 2007) (Walske & Zacharakis, 2009). Despite extensive research efforts, obtaining specific information on Entrepreneurial experience proved to be a challenge. Later in the research study, it was found that there were no significant differences between experienced and inexperienced venture capitalists in terms of the criteria they considered during the investment process.

2.4. Overview of the research model

Figure 2 illustrates the conceptual model, displaying the relationships between the independent variables (Industrial Market experience, Top Management experience, and Entrepreneurial experience of the VCs) and the dependent variable (Decision-making criteria). The model also includes various control variables. In paragraph 3.2.3, an explanation of these control variables is provided, clarifying their role in the research framework.

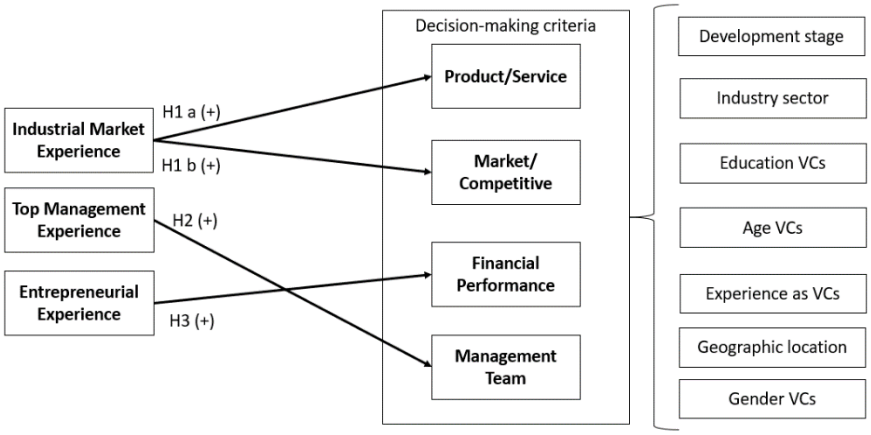

Figure 2. Conceptual model

3. Research method

This chapter will present the research method employed in this study to investigate the relationships between the varied experience of venture capitalists and their prioritization of decision-making criteria in the context of venture capital investments. Furthermore, insights into the methodologies used for data collection and analysis will be provided.

3.1 Data collection and questionnaire

In this study, the target population will consist of venture capitalists and professionals actively engaged in investment decision-making within the venture capital industry. To collect the necessary data, a structured questionnaire is developed. The reason for choosing for a questionnaire over open-ended interviews stems from the extensive information available in the existing literature on the subject. Therefore, there was no necessity to conduct open-ended interviews. Additionally, a structured questionnaire is more suitable for gathering specific information about the variables under investigation. Moreover, it can be more efficient to collect data from a larger sample through a questionnaire compared to open interviews. The questionnaire is designed to gather information on the variables of interest in a systematic manner. It will be divided into two sections: the first section will focus on collecting demographic information about the participants, while the second section will center on the Likert scale-based measurement of the dependent variables. Approximately 200 companies were approached for this research study. However, it was not successful. A large part of the companies did not respond. What worked well was the personal approach to venture capitalists, often through LinkedIn. This is a social networking site that focuses to business users. Additionally, venture capitalists were approached through personalized emails. While searching for individuals on LinkedIn, the primary criterion was whether someone was actively working in the venture capital industry. The investigation involved checking for specific job titles such as analyst, partner, or principal. If an individual held any of these roles (or something similar), contact was initiated. Sometimes it was also checked whether someone had certain experience. Ultimately, a personalized message was sent via the chat and subsequently, the survey link was shared. This approach was taken to ensure that the outreach was targeted towards professionals with relevant experience and insights in the venture capital sector.

To determine the sample size for this research study, the significant level and the power degree will be considered. A significance level of 0.05 will be utilized, indicating a 5% chance of obtaining a significant result purely by random chance (Cavus, 2022). The power degree will be set at 0.80, implying an 80% chance of correctly identifying a significant effect. This minimizes the likelihood of a type II error, which

occurs when the null hypothesis is falsely retained (Serdar, Cihan, Yücel, & Serdar, 2020). The selected sample size should be at least 100. However, it is important to note that a higher number of respondents would increase the reliability of the research findings (Lakens, 2001) (Hobbs, Rees, Farmer, & Cole, 2015). Several studies relied on small sample sizes below 100 respondents (Kakati, 2003) (Zacharakis & Meyer, 2000) (Shepherd, Zacharakis, & Bardon, 2003). This suggests that the findings should be interpreted with caution due to potential limitations in broad generalizability. The sample size for this research is 108 respondents, with 100 questionnaires being fully completed. Thus, let's say 100 respondents. This number of respondents is consistent with previous research studies. Appendix 1 contains the questionnaire for respondents. A professional from the venture capital industry was consulted to provide feedback on this questionnaire. The summary of the given feedback can be found in Appendix 2. The reviewer's feedback was carefully integrated into the questionnaire.

In table 7, a brief summary of the demographic characteristics of the 100 respondents is provided. In Section 4.1, a more detailed discussion on this topic is presented. The majority of respondents were male, comprising 94% of the sample. This is consistent with previous research findings (Seong & Kim, 2021). Respondents held diverse job positions, with Analyst being the most common title (31%). The age distribution revealed a high proportion falling within the 25-34 age category (53%), with 65 respondents below the age of 34. There were no participants older than 64 years old; the oldest participant is 64 years old.

Variable	Value	N (or %)
Gender	*Male*	94
	Female	6
Function	*Analyst*	31
	Partner	24
	Principal	13
	Associate	15
	Investment Manager	13
	Owner	3
	Syndicate	1
Age	*< 25*	10
	25 – 34	53
	35 – 44	19
	45 – 54	10
	55 – 64	8
	> 64	0

Table 7. Brief summary demographic characteristics. (total of 100 respondents)

3.2 Measuring the variables

The three independent variables in the literature are: Industrial Market experience, Top Management experience, and Entrepreneurial experience. These variables will be dichotomized into two categories for each dimension: "Experience" and "No Experience". The dependent variable in this study is measured using a 5-point Likert scales.

3.2.1 Prior Experience of VCs variable

In this paragraph the independent variables are explained.

Industrial Market experience: A person with Industrial Market experience refers to an individual who has built up practical knowledge, skills, and expertise through their involvement in the related industrial sector where the VCs going to invest (Abell & Nisar, 2007). Drawing on the work of Kim and

Lee (2022) VCs with high experience level, have accumulated more than 5 years of experience in the specific industry related to the investment. This level of experience indicates a deep understanding of the industry dynamics, trends, and key players, potentially influencing the decision-making criteria employed by venture capitalists. An VCs with Industrial Market experience, in specific industry related to the investment, have "Experience" and otherwise "No Experience" (Kim & Lee, 2022). Understanding how the venture capitalist's industry experience influences their decision-making criteria can provide valuable insights into the role of expertise and industry knowledge in venture capital investments (Gompers, Kovner, & Lerner, 2009) (Siegel, Siegel, & Macmillan, 1993).

Top-management experience: An VCs got Top Management experience if (s)he had positions like CEO (Chief Executive Officer), COO (Chief Operating Officer), CFO (Chief Financial Officer), CMO (Chief Marketing Officer), CTO (Chief Technology Officer), and other C-suite roles (Walske & Zacharakis, 2009). This individual would have been involved in making investment decisions, managing investment portfolios, and overseeing the overall operations and growth of the firm (Zarutskie, 2010). An VCs who had previous leadership or senior executives roles will fall in the category "Experience" and if this is not the case than "No Experience" (Miloud, Cabrol, & Aspelund, 2012).

Entrepreneurial experience: A person with Entrepreneurial experience refers to an individual who has been actively involved in the process of starting, launching, and running their own business or businesses (Glücksman, 2020) (Kirsch, Goldfarb, & Gera, 2006). This experience enables VCs to bring a unique perspective to their roles as investors and advisors. They can empathize with the struggles faced by early-stage entrepreneurs and understand the risks involved in building a startup (Seong & Kim, 2021) (Panda & Dash, 2016). The VCs with Entrepreneurial experience will fall in category "Experience" and otherwise "No Experience".

3.2.2 Decision-making criteria variable

The dependent variable of this research design are the decision-making criteria utilized by venture capitalists in the context of venture capital investments in screening stage. Previous research studies also frequently employ Conjoint Analysis, which entails forming a combination of decision-making criteria. Respondents are required to indicate their agreement or disagreement on a scale of 1 to 5 (Svetek, 2023) (Kollmann & Kuckertz, 2010). Identifying and understanding the attributes relevant to investor preferences can be challenging in Conjoint Analysis. Consequently, the decision was made to evaluate each criterion separately. This approach also allows for the precise identification of which specific criteria are influenced by a particular experience. The measurement of this variable is based on a 5-point Likert scale, which represents a ratio scale of measurement. A ratio scale allows for the quantification of the relative importance of different criteria by assigning values to the responses on the Likert scale (Harpe & Pharmd, 2015). In this case, the scale ranges from “not important” to “very

important", enabling to capture the varying degrees of importance assigned to each decision-making criterion. By employing an interval scale, this research design enables a more precise analysis of the decision-making criteria in venture capital (Vonglao, 2017).

Section 2.2.2 described four different groups from which decision-making criteria can emerge. The different groups are Product/Service Evaluation, Market/Competitive Analysis, Financial Performance, and Management Team. Each group is measured based on 5 specific criteria (see table 5, chapter 2). The selection of these criteria is inspired by the different groups of decision-making criteria (Portmann & Mlambo, 2013) (Widyanto , Dalimunthe, & Triono, 2021) (Nunes, Felix, & Pires, 2014) (Mason & Stark, 2004). Below is one more brief explanation of what is measured with each group. The category of Product/Service evaluation focuses on assessing the viability and market potential of the product or service offered by the venture. This includes factors such as uniqueness, scalability, and technological innovation (Kakati, 2003). Market/Competitive Analysis encompasses evaluating the market size, level of competition, competitive landscape, and market trends (Riquelme & Watson, 2002). Financial Performance examines the financial viability of the venture, including revenue projections, profitability, and potential return on investment (Allen & Hevert, 2007). Lastly, Management Team evaluates the expertise, experience, track record, and capability of the venture's management team to execute the business plan effectively (Deventer & Mlambo, 2008). In table 8, there is a summary of the criteria groups with the corresponding items/criteria asked to the respondents.

Criteria group	**Items/criteria**
Product/Service	Uniqueness, scalability/growth, quality standards, intellectual property, alignment current market trends
Market/Competitive	Level of competition, differentiation, entry challenges, market trends, market size
Financial Performance	Profitability, ensure return on investment, growth potential, no follow-up investments, low monitoring/administration costs
Management Team	Track record, leadership skills, offers feedback, knowledge sector, honesty and integrity

Table 8. Summary of criteria groups with the corresponding items/criteria.

Table 9 presents a summary of the constructs, along with their associated items and measures utilized in this study. The independent variables, representing the level of experience, will be dichotomized, while the dependent variable will be assessed using a 5-point Likert Scale. The dependent variable consists of four groups, each will be measured separately.

Constructs	Items	Measure
Industrial market experience	VCs who have built up practical knowledge, skills, and expertise through their involvement in the related industrial sector where the VCs going to invest	These variables will be dichotomized into two categories for each dimension: "Experience" and "No Experience"
Top management experience	Position like: COO, CFO, CTO or other C-suite and other leadership roles within organizations	These variables will be dichotomized into two categories for each dimension: "Experience" and "No Experience"
Entrepreneurial experience	Involved in the process of starting, launching, and running their own business or businesses	These variables will be dichotomized into two categories for each dimension: "Experience" and "No Experience"
Decision-making criteria	Four groups: Product/Service Evaluation, Market/Competitive Analysis, Financial Performance/Potential Return, and Management Team.	5-point Likert Scale. Different criterions assessed from "not important" to "very important".

Table 9. Variables definition of the research study.

3.2.3 Control variable

Control variables are frequently employed to manage potential external factors that could impact the relationship between dependent and independent variables. In the context of this research, several control variables are introduced to ensure a thorough understanding of the decision-making criteria employed by VCs. Table 10 shows the measurements of each control variable.

Development Stage: One essential control variable in this study relates to the developmental stage of the ventures in which VCs invest. In existing literature, no universal terminology is universally adopted to describe these lifecycle stages (Block, Fisch, Vismara, & Andres, 2019). For this investigation, the terms pre-seed, seed, series A, and series B are employed, based on practical advice. Nevertheless, alternative terms such as early, stage, and growth stage are also found in other studies. To address potential ambiguity, the questionnaire includes keywords to specify the intended phase. For instance, the Seed stage refers to companies actively working towards achieving product/market fit.

Industrial sector: Different sectors often have different characteristics. By looking at which sector a VC is most invested in, the industry sector has been added as a control variable. By adding this, it can be ensured that any variation is not easily attributable to sectors/industries in which the VC is active (Zhang, 2011). In the questionnaire, the following sectors/industries can be chosen: Software, High-tech, Fintech, Impact, Cleantech, and MedTech. Respondents also have the option to specify another sector. This allows respondents to go beyond the predefined six industries.

Education of VCs: Another crucial control variable involves the educational background of VCs. The level of education may shape mental schemas (cognation) which influence the decision-making criteria (Ucbasaran, Westhead, Wright, & Flores, 2010). VCs with higher educational degrees have undergone different schooling processes compared to those with lower educational backgrounds. The inclusion of this control variable aims to explore the potential impact of education on the selection of decision-making criteria.

Age of VCs: The age of VCs is identified as a control variable with the potential to affect various aspects of their behavior and cognition. Age often correlates with the accumulation of experience. Older individuals may possess more extensive experience than recent graduates. This potentially influences the decision-making processes (Ucbasaran, Westhead, Wright, & Flores, 2010).

Experience as VCs: Similar to education level, the experience of VCs is considered a critical control variable. Experience in the VC industry can shape unique mental schemas (cognation), which affects the decision-making criteria (Ucbasaran, Westhead, Wright, & Flores, 2010). This research study is about prior experience of VCs. To eliminate the possibility that the experience of VCs influences the research study, this control variable is introduced (Block, Fisch, Vismara, & Andres, 2019).

Geographic location: Different continents often have distinct cultures, values, and business practices. Also the market conditions can vary across different continents. Including geographic location as a control variable helps control for these differences that might impact the venture capital decision-making (Block, Fisch, Vismara, & Andres, 2019).

Gender of VCs: Lastly, the variable of gender is introduced as a control variable. According to previous research most respondents of VCs research are men. This makes it more interesting if there is any different between genders. Considering gender as a control variable aligns with ethical research practices and promotes inclusivity (Kim & Lee, 2022).

Control variables	**Measurement**
Development stage	Categories: Pre-seed, seed, series A, series B.
Industry sector	Categories: Software, High-tech, Fintech, Impact, Cleantech, MedTech, others (fill in)
Education	Categories: intermediate vocational, bachelor's degree, master's degree, doctoral degree, and others
Age	The age of the venture capitalist
Experience as VCs	The number of years the participants worked as a venture capitalist
Geographic location	Categories: Europe, Asia, North America
Gender	Female, male, other

Table 10. Control variables with measurement.

3.3 Data analysis

To analyze the data, several methods are used. Analyzing the hypotheses involves comparing the means of different VCs groups based on their experience. The independent sample t-test presents itself as a straightforward method for testing the hypothesis. An alternative nonparametric test is the Mann-Whitney U test. Both tests are used in this report. Because many control variables also needed to be tested, an analysis of covariance (ANCOVA) test was chosen for the control variables.

3.3.1 Previous research studies

In some research studies, different types of analyses were carried out. In a study by Portmann and Mlambo (2013), they used both ANOVA and t-tests. The ANOVA test was used to look at how private equity (PE) firms and venture capital (VC) firms ranked four categories (management, product, financial, and market considerations). This test helped see if there were important differences in the rankings within each type of firm. To check the significance of differences between PE and VC firms, and between VC firms in 2007 and 2010, they used t-tests for matched pairs on the average rankings of 54 criteria. In another study by Zacharakis and Meyer (2000), they used Multivariate Analysis of Variance (MANOVA) to understand how venture capitalists (VCs) make investment decisions. They focused on assessing potential success using a Likert Scale across three groups with different decision cues. The decision cues were the independent variables, and VCs' likelihood assessments of venture success were the dependent variables. The aim was to find significant differences in these assessments among the groups. Another research by Nunes, Felix, & Pires (2014) also did research about decision making criteria. They also compared two groups on average of importance on the decision-making criteria. Because their data was not normal distributed, they used a nonparametric Mann-Whitney U test. They tested two means form two different groups. Deventer and Mlambo in 2008 did research similar to Zacharakis and Meyer but used ANOVA to investigate the influence of different groups on investment decisions. Unlike the previous study, there was no independent variable; they examined the perceived importance of Management Considerations, Product Considerations, Financial Considerations, and Market Considerations.

Previous research studies serve as a good example for the approach used in this study. Many research studies used multiple tests to analyze the data. In this analysis, the Mann-Whitney U test, independent sample t-test, and the ANCOVA test were chosen. In the study by Nunes, Felix, & Pires (2014), the data were not normally distributed, leading them to use the Mann-Whitney U test. In my study, the data are partly normally distributed and partly not. Therefore, both the independent sample t-test and the Mann-Whitney U test were chosen for the data analysis. To test the control variable, the ANCOVA test was chosen. This test is slightly different than the ANOVA test. Here, you can also include a covariate (also called a control variable) in the model. ANCOVA combines the concept of a t-test with linear regression, allowing for the control of the influence of one or more variables. The reason this test was chosen is that there is no nonparametric test that includes the covariate in the analysis.

3.3.2 Statistical Methods

Descriptive statistics is employed to summarize and describe the characteristics of the collected data. Measures such as means, standard deviations, frequencies, and percentages will be calculated for each

variable. Ultimately, there is an overview of the participants' responses. Also, various visual representations are created of the data such as diagrams (Mathur & Kaushik, 2014).

The hypotheses aim to explore potential relationships between venture capitalists' (VCs) experiences and their weighting of specific criteria. The first hypothesis suggests that VCs with more Industrial Market experience are expected to place a stronger emphasis on Product/Service and Market/Competitive criteria compared to those lacking such experience. The second hypothesis posits that VCs with greater Top Management experience are anticipated to assign more importance to Management Team criteria than their counterparts without such experience. Lastly, the third hypothesis suggests that VCs with more Entrepreneurial experience will likely give higher priority to Financial Performance compared to those without Entrepreneurial experience. To test these hypotheses, a Mann-Whitney U test and an independent sample t-test is employed. These tests are statistical methods used to compare means between two groups and assess whether the observed differences are statistically significant (Kim T. K., 2015). In this scenario, the tests would help determine if there are significant differences in the weighting of criteria between VCs with specific experiences (Industrial Market, Top Management, and Entrepreneurial experience) and those without. The null hypothesis posits no significant difference, with the alternative hypothesis suggesting the opposite. The results of the tests would provide insights into whether the observed variations in criteria weighting are likely due to random chance or if there is a meaningful association with the VCs' respective experiences.

For each control variable, such as development stage, industry sector, education, age, experience as venture capitalists, and gender, the data are organized into groups based on the specific categories. These control variables contribute to the internal validity of the study. The Analysis of Covariance (ANCOVA) test is conducted to assess the impact of the control variable. As mentioned before, the ANCOVA test combines the concept of a t-test with linear regression, allowing for the control of the influence of one or more variables. The reason this test was chosen is that there is no nonparametric test that includes the covariate in the analysis. It must be taken into account that the data are not normally distributed, and therefore, the p-values are somewhat less reliable.

4. Results – data analysis

This chapter presents the data and describes the extent to which the hypotheses are accepted. It includes the demographic characteristics and descriptive statistics. Before the analysis, certain assumptions are considered. Subsequently, the predetermined hypotheses are examined, and the control variables are analyzed.

4.1 Demographic characteristics and descriptive statistics.

A total of 108 individuals participated in responding to the questionnaire. Within this respondent pool, a subset of 8 questionnaires was identified as incomplete and consequently excluded from the dataset. This ultimately provided a dataset with 100 fully completed questionnaires, forming the basis for this research study. Before delving deeper into the statistical analysis, the background of the respondents is described. Table 11 provides the demographic characteristics of the 100 respondents. In terms of gender, the majority of respondents were male, accounting for 94%, while females made up the remaining 6%. This gender distribution aligns with previous research studies where men were also in the majority (Seong & Kim, 2021). Respondents held various job positions, adding an interesting dimension to the study. The most common job title among the respondents was Analyst (31%). Notably, 53% of the participants fell within the 25-34 age category, including 65 respondents below the age of 34. This concentration of younger participants signifies a substantial engagement from this demographic in the study. The younger respondents emphasized that they had encountered similar situations in the past. Furthermore, they frequently mentioned the challenges in recruiting participants for their research studies. Despite these difficulties, they expressed a strong willingness to participate in the research. Respondents came from 14 different countries. Out of these, half were from the Netherlands, and the other half were from various countries around the world. I believe the primary reason for the majority of participants being from the Netherlands is that I am Dutch myself and attend a Dutch university. When the respondents are divided by continents, 96 respondents are from Europe, 1 from Asia, and 3 from North America. Therefore, the majority of the respondents are from Europe.

Regarding the development stages, participants had the opportunity to specify various stages in which they were actively investing. Table 12 provides the investments characteristics of the respondents. More than half of the respondents indicated that they do not just focus on a specific development stage but invest in different stages. The most predominant combination was observed in Pre-seed & Seed investments, which was indicated by 25 respondents. This underscores a substantial focus on early-stage ventures within the surveyed group. Additionally, the combination of Seed & Series A garnered attention, with 18 respondents expressing their involvement in this particular stage of development. The deal size indicates that respondents are investing in opportunities of various sizes,

with more than half of the respondents investing between $1 million and $10 million. Moreover, half of the respondents prefer to invest internationally. This global outlook signals that respondents are interested in taking advantage of opportunities beyond their own borders. In contrast, 26% of the respondents indicate a preference for national investments and 15% prefer local investment. This emphasizing a focus on opportunities within their home country. The predominant focus of respondents' investments is notably concentrated in the Software industry, accounting for a substantial 40% of respondents. This is followed by the High-Tech sector, which represents 18% of respondents. The reason that more than half of the respondents are in the High-Tech and Software industry is likely due to technological advancements worldwide. The Software industry is known for its innovative character and the continuous development of advanced technologies. Investors may be drawn to this industry due to the potential to benefit from groundbreaking technological progress. Investors may therefore consider these industries as promising sectors with substantial profit opportunities. The presented tables provide valuable insights into the diversity within the dataset. This finding aligns with the research of Robinson (1987), who observed significant differences among VCs in investment stages and variations in the size of minimum investments. The continued existence of different types of investments and strategies underscores the adaptive nature of venture capital, in which investors are constantly evolving and innovating to respond to emerging opportunities.

Variable	Value	N (or %)
Gender	*Male*	94
	Female	6
Function	*Analyst*	31
	Partner	24
	Principal	13
	Associate	15
	Investment Manager	13
	Owner	3
	Syndicate	1
Age	*< 25*	10
	25 – 34	53
	35 – 44	19
	45 – 54	10
	55 – 64	8
	> 64	0
Country	*Netherlands*	50
	Germany	16
	Belgium	10
	Switzerland	5
	France	4
	England	3
	Spain	3
	USA	2
	Turkey	2
	Luxembourg	1
	Italy	1
	Canada	1
	India	1
	Czechia	1

Table 11. Demographic characteristics of respondents

Variable	Value	N (or %)
Development stage	*Pre-seed*	7
	Seed	12
	Series A	8
	Series B	5
	Pre-seed & Seed	24
	Pre-seed, Seed, Series A	13
	Pre-seed, Seed, Series A & B	5
	Seed & Series A	18
	Seed, Series A & B	1
	Series A & B	7
Deal size	*Under $1 million*	37
	$1 million - $10 million	61
	Above $10 million	2
Specific geographic preferences	*Local/regional*	15
	National	26
	International	50
	No specific preferences	9
Industry	*Software*	40
	High-tech	18
	Fintech	6
	Impact	12
	Cleantech	10
	MedTech	6
	Others	8

Table 12. Investment characteristics of respondents.

Figure 3 illustrates the amount of prior experience respondents had. Out of the 100 respondents, 78 reported having experience in the Industrial Market, indicating a substantial pool of individuals familiar with the industrial market in which they currently invest as VCs. Regarding Top Management experience, 27 respondents held C-suite positions or other leadership roles within organizations before transitioning to VCs. Furthermore, 42 participants possessed Entrepreneurial experience, highlighting a high proportion with firsthand knowledge of the challenges and opportunities inherent in starting and running businesses.

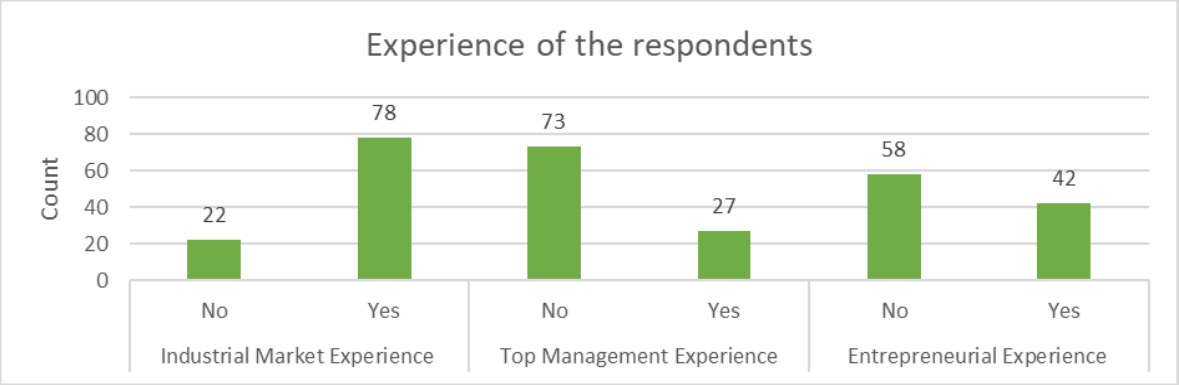

Figure 3. Number of respondents who had Industrial Market experience, Top Management experience and Entrepreneurial experience

Table 13 (see next page) provides a summary of statistics related to the data collected during the survey. It includes information such as the number of observations, mean, standard deviation, minimum, and maximum values. Additionally, a descriptive explanation is provided for each variable, detailing how the variable is measured. The majority of respondents are male, consistent with previous research indicating a predominant male workforce in VC companies (Seong & Kim, 2021). Therefore, the variable is comparable to the target sample. This research study included 53 respondents between the ages of 25 and 34 years old. This demographic point contrasts with some prior studies where most respondents tended to be older, falling within the 35 to 44 years range (Franke N. , Gruber, Harhoff, & Henkel, 2008). The respondents are thus on the younger side. This is reflected in the average of experience in being an VCs, which is 4.4 years. In a similar study by Shepherd, Richard & Andrew (2000), the average of having VC experience was 7.7 years. The majority of participants hold a Master's degree, specifically 71 respondents. This prevalence of Master's degree holders in the sample aligns with similar observations made in other research studies (Walske & Zacharakis, 2009). The alignment of the variables in dataset with broader trends observed in similar research studies reinforces the representativeness of the sample.

In table 13 and figure 3, it is observed that more than half of the respondents have Industrial Market experience. In contrast, Top Management and Entrepreneurial experience are reported by fewer than half of the respondents. The distribution of experience groups in the sample is not entirely symmetrical. Despite the non-symmetrical distribution, it is notable that this pattern aligns reasonably well with findings from prior research on prior experiences VCs (Franke et al., 2008; Franke eta al.,2006). However, in the case of Top Management experience, these prior studies had more respondents with this type of experience. Although the asymmetric distribution can be seen as a deviation from perfect balance, it is important to emphasize that such differences are not necessarily problematic in the context of compering means. In fact, this diversity in experience types adds to the complexity of the sample, providing a more precise picture of the diverse backgrounds and skills held within the venture capital population. In the survey, respondents were tasked with assessing five distinct criteria within each criterion group, and subsequent calculations yielded the average scores for each criterion. Across different criterion groups, the Market Competitive group scored the highest with a score of 4.1. The Financial Performance received the lowest scores, with a score of 3.4. In section 4.2, the relationship between the four criteria groups is described.

Variable	N	Mean	S.D.	Min	Max	Description
Age	100	2,53	1,068	1	5	Age of the respondent (1 = < 25, 2 = 25-34, 3 = 35-44, 4 = 45-54, 5 = 55-64)
Gender	100	0,94	/	0	1	Gender of the respondent (dummy: 0 = female, 1 = male)
Experience as Venture Capitalist	100	4,41	5,168	0	25	Experience of the respondent as investor (in years)
Development stage	100	4,15	/	1	5	Development stage (1 = pre-seed, 2 = seed, 3 = series A, 4 = series B, 5 = combination of stage's)
Industry sector	100	2,84	3,034	1	7	Industry sector: (1= Software, 2 = High-tech, 3 = Fintech, 4 = Impact, 5 = Cleantech, 6 = MedTech, 7 = Others)
Education VCs	100	2,90	0,560	1	4	Level education (1 = Intermediate, 2 = Bachelor's degree, 3 = Master degree, 4 = Doctoral degree)
Function investor	100	2,81	1,594	1	7	Function (1 = Analyst, 2 = Principal, 3 = Partner, 4 = Associate, 5 = Investment Manager, 6 = owner, 7 = Syndicate)
Deal size	100	1,65	0,520	1	3	Size (1 = under $ 1 million, 2 = 1-10 million, 3 = above $10 million)
Industrial Market experience	100	0,78	/	0	1	Experience in Industry Market (dummy: 1 = yes, 0 = no)
Years experience Industrial Market	78	5,759	6,248	0,3	30	Experience in Industrial Market (in years)
Top Management experience	100	0,27	/	0	1	Experience as Top Manager (dummy: 1 = yes, 0 = no)
Years experience Top Management	27	8,459	6,893	1	25	Experience in Top Management (in years)
Entrepreneurial experience	100	0,42	/	0	1	Experience as Entrepreneur (dummy: 1 = yes, 0 = no)

Years experience Entrepreneur	42	4,679	4,305	1	20	Experience in Top Management (in years)
Product/Service (Mean)	100	3,906	0,603	2,00	4,80	The scores added together and divided by 5
Market/Competitive (Mean)	100	4,100	0,475	2,60	5,00	The scores added together and divided by 5
Financial Performance (Mean)	100	3,424	0,449	2,40	4,60	The scores added together and divided by 5
Management Team (Mean)	100	3,920	0,646	2,20	5,00	The scores added together and divided by 5

Table 13. Summary statistics of the sample.

4.2 Analysis decision-making criteria

One of the final questions asked in the survey inquired how the respondent would categorize the four groups from most important to least important. In figure 4 a bar chart displays the results of this categorization. The blue color represents rank 1, signifying the most important category. This category achieved the highest score within the Market Competitive criteria group. The second most important group was the Financial Performance group. In third place was the Management Team criteria group, followed by the Product/Service criteria group as the last. However, these results do not fully align with the data presented in table 13 (summary statistics of the sample). In that table, respondents were asked to evaluate specific criteria, and the average of those criteria was calculated. According to table 13, the Market/Competitive group scored the highest, followed by the Management Team and Product/Service, with the Financial Performance category scoring the lowest.

Several potential explanations exist for the observed difference between ranking the groups and evaluating each specific criterion. In the survey question regarding the categorization/ranking of categories from most important to least important, respondents may have employed a more subjective approach. On the other hand, in table 13, where respondents were asked to assess certain criteria, there might be a more objective measurement of specific criteria without the context of categories. Respondents could also be influenced by selective memories, where recent events carry more weight in evaluating categories, leading to a distorted perception of what they consider important (Saunders, 2012). Selective memory bias may also play a role, as respondents may adjust their answers based on social expectations or external influences (Saunders, 2012). Additionally, differences in measurement methods could contribute to variations in results. The criteria that respondents are required to assess individually were measured on a 5-point Likert scale, which measures the intensity of preference for

each criterion independently. In contrast, the ranking question asks respondents to prioritize entire groups, potentially leading to differences in how respondents express their preferences.

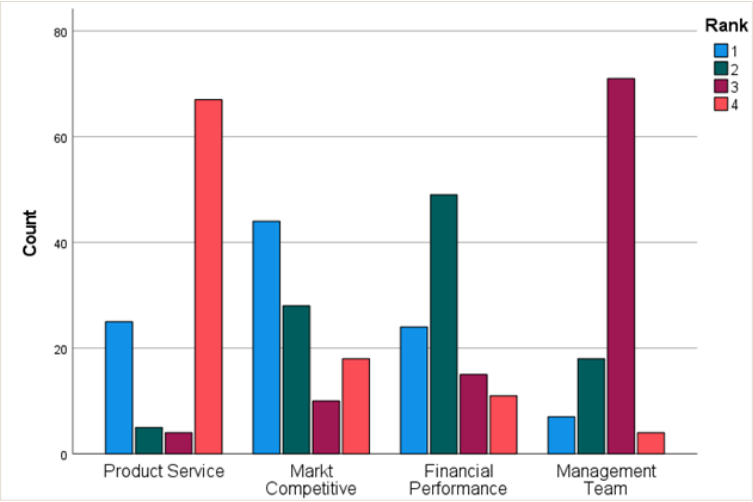

Figure 4. Results of the ranking of the criteria groups. 1= Most important, 4 Least important.

An additional analysis is conducted to examine whether there were differences between the criteria groups without considering the prior experience of the VCs. This test is thus about the evaluation of specific criteria not the ranking question (figure 4). The scores of the criteria per group are added together and divided by 5 (see table 13). Due to the Shapiro-Wilk test yielding a significant result, preventing the use of an ANOVA test, the Kruskal-Wallis test was employed as a nonparametric alternative. The results of the Kruskal-Wallis test indicate significant differences between the groups with a p-value of <0.001. Table 14 shows which specific groups differ from each other. This is essential when the Kruskal-Wallis test indicates a significant difference between the groups.

The Market Competitive vs. Financial Performance and Financial Performance vs. Product/Service comparisons both revealed highly significant mean differences of 0.676 ($p < 0.001$) and 0.482 ($p < 0.001$). The Market Competitive group scored the highest importance, while the Financial Performance group scored the lowest. The Product/Service group scored third in terms of importance. Interestingly, the Market Competitive vs. Management Team and Management Team vs. Product/Service comparisons showed non-significant mean differences of 0.18 ($p = 0.097$) and 0.014 ($p = 0.809$). After Market/Competitive criteria, the Management Team scored as the second most important criteria group. Therefore, there is no significant difference between these groups. The comparison between Product/Service and Market/Competitive groups exhibited a statistically significant mean difference of -0.194 ($p = 0.029$). The Product/Service group scored third in terms of importance. Likewise, the Product/Service vs. Financial Performance comparison showed a highly significant mean difference of

0.482 ($p < 0.001$). Financial Performance scored last in terms of importance. Finally, the Financial Performance vs. Management Team comparison exhibited another highly significant mean difference of 0.496 ($p < 0.001$), highlighting a considerable difference between these two groups.

Differences between the groups		**Mean Difference**	**P-value**
Product/Service	Market Competitive	-,194	,029*
	Financial Performance	,482	<,001***
	Management Team	-,014	,809
Market Competitive	Product/Service	,194	,029*
	Financial Performance	,676	<,001***
	Management Team	,18	,097
Financial Performance	Product/Service	-,482	<,001***
	Market Competitive	-,676	<,001***
	Management Team	-,496	<,001***
Management Team	Product/Service	,014	,809
	Market Competitive	-,18	,097
	Financial Performance	,496	<,001***
Overall Test statistics (Kruskal-Wallis)	<,001***		

Table 14. Kruskal-Wallis test. Table also shows the differences between the groups without looking at the prior experience of the VCs . *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001.

In this analysis, it was also investigated whether there was any difference between the items/criteria by criteria group. The data in table 15 shows interesting differences between the criteria within the various criteria groups.

Criteria group	**Items/criteria**	**Mean**	**SD**
Product/Service	Uniqueness	4,15	,833
	Scalability/growth	4,46	,846
	Quality standards	3,61	,840
	Intellectual property	3,47	1,068
	Alignment current market trends	3,84	,861
Market/Competitive	Level of competition	3,93	,795
	Differentiation	4,45	,702
	Entry challenges	4,04	,816
	Market trends	4,02	,829
	Market size	4,06	,941
Financial Performance	Profitability	4,10	,759
	Ensure return on investments	4,39	,952
	Growth potential	4,52	,659
	No follow-up investments	2,08	1,070
	Monitoring/ administration costs	2,03	,937
Management Team	Track record	3,73	,802
	Leadership skills	3,89	,942
	Offers feedback	3,62	,982
	Knowledge sector	4,14	,841
	Honesty/integrity	4,22	,949

Table 15. The mean of each criterion separately with the standard deviation. 1 = not important; 5 very important.

In the Product/Service criteria group, the Scalability/Growth criterion is assigned a higher score of 4.46. This suggests that venture capitalists find it very important to see future returns. This is also reflected

in the criteria related to the uniqueness of the product/service, which scored 4.15, indicating that VCs consider it very important for the companies they invest in to be unique. In contrast, intellectual property has a mean score of 3.47, which is lower compared to other criteria in this group. This criterion has a high standard deviation (1.068), indicating greater variability in responses. This variability suggests that opinions on the importance of intellectual property are more dispersed among respondents. The reason for the low score of this criterion may be the nature of the industry or business, which may not heavily rely on proprietary technology.

In the Market Competitiveness group, the criterion of level of competition receives the lowest score of 3.93. The lower emphasis on the level of competition may suggest that respondents consider the company's internal strengths and strategic positioning to be more crucial for success than the competitive landscape alone. The higher score for differentiation suggests that respondents place high emphasis on the uniqueness or distinctiveness of the company's offerings in the market. Differentiation is often crucial for standing out in a competitive landscape and attracting customers. The entry challenges, market challenges, and market size are scored almost the same. These three criteria may be perceived as having a comparable impact on the company's competitive positioning.

In the Financial Performance criteria group, the growth potential criterion is given the highest importance with a score of 4.52. High growth can lead to increased market share, revenue, and ultimately a higher valuation, aligning with the VC model of seeking substantial returns through successful exits. The criteria for profitability and ensuring a return on investment also scored high. The importance assigned to ensuring a return on investments suggests a focus on financial sustainability and the ability to deliver value to investors. In contrast, the criteria for 'no follow-up investment' and 'monitoring/administration costs' receive low scores of 2.08 and 2.03, respectively. VCs may consider these criteria as less important in the initial evaluation because their primary focus is often on the potential for high returns and growth. They may prioritize factors that directly impact financial performance and scalability.

The Management Team category reveals a mix of scores. The highest score within the management team criteria group is for honesty/integrity at 4.22. This shows that trustworthiness is an important factor for successful partnerships. The same holds for the criteria related to the knowledge of the management team. However, the other three criteria (track record, leadership skills, and offering feedback) scored slightly lower in terms of importance. VCs may think that these criteria do not have a direct impact on the company compared to the criteria related to knowledge of the sector and honesty/integrity.

The subsequent paragraphs will explore whether there are significant differences in experience types and criterion groups.

4.3 Assumptions for testing the effect of prior experience types on decision-making

Before conducting the analysis, certain assumptions need to be addressed. For a t-test to be appropriate, the dependent variable must be measured on a continuous interval or ratio scale, and the independent variable should consist of no more than two groups. Additionally, an assessment of data normality is essential. To measure this, a Shapiro-Wilk test is employed. This test holds that the null hypothesis implies a normal distribution, and the alternative hypothesis indicates a distribution deviating from normality. The homogeneity of variance is also examined using Levene's test, which assesses whether the variation is consistent across the groups. This test holds that the null hypothesis implies that there is significant difference between the variance, and the alternative hypothesis indicate the variance are not significantly different from each other. The results of the Shapiro-Wilk test and Levene's test are available in table 16.

Industrial Market Experience		**Shapiro-Wilk Test for Normality**	**Levene's Test (Equality of Variance)**
		P-value	**P-value**
Product/Service	No	,003**	<,001***
	Yes	,025*	
Market Competitive	No	,016*	,719
	Yes	,009**	
Financial	No	,133	,735
	Yes	,127	
Management Team	No	,096	,219
	Yes	,003**	
Top Management Experience		**Shapiro-Wilk (Test of Normality)**	**Levene's Test (Equality of Variance)**
		P-value	**P-value**
Product/Service	No	<,001***	,374
	Yes	<,001***	
Market Competitive	No	,001***	,821
	Yes	,046*	
Financial	No	,200	,247
	Yes	,734	
Management Team	No	,085	,033*
	Yes	,004**	
Entrepreneurial Experience		**Shapiro-Wilk (Test of Normality)**	**Levene's Test (Equality of Variance)**
		P-value	**P-value**
Product/Service	No	<,001***	,691
	Yes	<,001***	
Market Competitive	No	,004**	,342
	Yes	,156	
Financial	No	,313	,270
	Yes	,647	
Management Team	No	,028*	,526
	Yes	,008**	

Table 16. Shapiro-Wilk Test and Levene's Test. *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001

Upon reviewing the results of the Shapiro-Wilk test, it becomes apparent that some variables do not exhibit a normal distribution, while others do. Consequently, a decision was made to perform both a parametric test and a non-parametric test because the data were partially not normally distributed. These tests include the independent sample t-test and the Mann-Whitney test. In terms of Levene's

test, it assessed whether the variation between groups differed. The outcomes varied across variables, with most not being statistically significant, indicating homogeneity of variance within the population. This implies that the variances are probably from the same populations, which is a positive finding. However, for variables where significance was observed, indicating unequal variance, the Welch t-test was utilized instead of the independent sample t-test. In statistical terms, the Welch t-test is an adjusted version for situations where there are unequal variances in the data. This ensures a more robust analysis when confronted with variations in variance across groups.

4.4 Hypotheses testing

This section shows the data analysis conducted in the study. To clarify, both the independent sample t-test and the Mann-Whitney U test were employed. The null hypothesis (H0) positing no difference between the two independent groups. The alternative hypothesis (H1) suggests a difference exists between the two groups, indicating that the distribution of observations in one group is systematically higher or lower than that in the other group. Tables 17, 18, and 19 present the data analysis for each experience group, encompassing observation counts, means, and mean differences. In the independent sample t-test results, the standard error difference is provided. This indicates the expected deviation in a sample estimate compared to the actual population value. Additionally, the associated p-value is included for hypothesis testing. To enhance data interpretation, the z-score derived from the Mann-Whitney U test is also reported. The z-score assists in evaluating the significance of the difference between the two groups. A negative z-score signifies that the observed U-value is smaller than expected under the null hypothesis. This provides insights into the directional nature of the observed differences.

4.4.1 H1: Industrial Market experience VCs -> Product/Service & Market/Competitive.

The first hypothesis investigated whether VCs with more Industrial Market experience would place a stronger emphasis on Product/Service criteria compared to VCs lacking this experience. The inexperienced group reported an average score of 3.4, while the experienced group assigned an average score of 4 to the Product/Service category. The experienced group gave a higher score on these criteria. In table 17, it can be observed that the p-value is lower than 0.05 in both tests. This indicates the rejection of the first hypothesis in favor of the alternative hypothesis. This implies that VCs with more experience in the industrial market significantly give a higher score to Product/Service criteria than those without this experience. The difference in scores between the groups is 0.6.

The other hypothesis investigated whether VCs with more Industrial Market experience would assign a stronger weighting to Market/Competitive criteria compared to VCs lacking this experience. This

hypothesis is supported by the independent sample t-test with a p-value of 0.042 but not by the Mann-Whitney U test, which has a p-value of 0.055. For this category, it appears that the data are not normally distributed (see table 16 Shapiro-Wilk test), indicating the need to consider the Mann-Whitney U test. In this case, the difference is not significant. Therefore, the null hypothesis is accepted, suggesting that there is no significant difference between the two groups. However, it is noteworthy that the p-value of 0.055 in the Mann-Whitney U test indicates that the difference almost reached significance. In this research, there is a sample size of 100 respondents, which is a substantial dataset. The difference is marginal, and achieving significance was nearly attained.

Industrial Market Experience		**N**	**Mean**	**Mean Difference**	**Independent Sample T-test**		**Mann-Whitney U Test**	
					Std Error Difference	**P-value**	**Z-score**	**P-value**
Product/Service	No	22	3,400	-,64872	,20461	,004**	-2,332	,020*
	Yes	78	4,048					
Markt Competitive	No	22	3,918	-,23310	,11288	,042*	-1,917	,055
	Yes	78	4,151					
Financial Performance	No	22	3,273	-,19394	,10712	,073	-2,089	,037*
	Yes	78	3,467					
Management Team	No	22	3,927	,00932	,15682	,953	,037	,867
	Yes	78	3,918					

Table 17. Industrial Market experience, test shows if there is difference in the weighting of criteria groups between VCs with experience and without experience. *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001. 1 = not important; 5 very important.

Table 17 also indicates a significant difference in the Financial Performance group. The difference between inexperienced and experienced VCs is not substantial, namely 0.194. However, it shows a p-value of 0.037, indicating a significant difference between the two experience groups.

4.4.2 H2: Top Management experience VCs-> Management Team

The second hypothesis posited that VCs with more Top Management experience would assign greater weight to Management Team criteria compared to VCs lacking this experience. See table 18. The average score for the inexperienced group in the Management Team category was 3.773, whereas VCs with experience leading a management team gave a higher score for these criteria, namely 4.319. Both tests indicated a low p-value of <0.001. This means that there is a significant difference between the two groups. The null hypothesis is therefore rejected, and the alternative hypothesis is accepted. This implies that VCs with more experience in the Top Management significantly give a higher score to Management Team criteria than those without this experience. The difference in scores between the two groups is 0.546.

Top Management Experience		N	Mean	Mean Difference	Independent Sample T-test		Mann-Whitney U Test	
					Std Error Difference	P-value	Z-score	P-value
Product/Service	No	73	3,896	-,03744	,13638	,784	-,063	,950
	Yes	27	3,933					
Markt Competitive	No	73	4,161	,22831	,10509	,032*	-2,279	,023*
	Yes	27	3,933					
Financial Performance	No	73	3,364	-,22080	,09913	,028*	-2,145	,032*
	Yes	27	3,589					
Management Team	No	73	3,773	-,54592	,11615	<,001***	-3,956	<,001***
	Yes	27	4,319					

Table 18. Top Management experience, test shows if there is difference in the weighting of criteria groups between VCs with experience and without experience. *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001. 1 = not important; 5 very important.

The Management Team group is not the only category where there is a significant difference between the two groups. Both the Market Competitive group and the Financial Performance group also exhibit a significant difference between the groups. In the Market Competitive group, VCs with no experience in Top Management actually scored higher than those VCs with this experience. On the other hand, in the Financial criteria group, the experienced group has significantly higher scores for the criteria.

4.4.3 H3: Entrepreneurial experience VCs-> Financial Performance

The final hypothesis posited that VCs with more Entrepreneurial experience would assign a greater weight to Financial Performance criteria compared to VCs lacking this experience. In table 19, it can be observed that VCs with Entrepreneurial experience scored slightly higher on the financial aspect, specifically 0.1146. While this difference is marginal, it is also reflected in the p-values of both tests. The tests yield a p-value higher than 0.05. This means that there is no difference between the experienced group and the inexperienced group in the Financial Performance criteria. This leads to the conclusion that in table 19, none of the groups exhibit significant variations from each other. These results suggest consistency in the evaluation of different criteria among Entrepreneurial experienced and Entrepreneurial inexperienced VCs.

Entrepreneurial Experience		N	Mean	Mean Difference	Independent Sample T-test		Mann-Whitney U Test	
					Std Error Difference	P-value	Z-score	P-value
Product/Service	No	58	3,959	,12529	,12207	,307	-1,763	,078
	Yes	42	3,833					
Markt Competitive	No	58	4,117	,04105	,09669	,672	-,811	,417
	Yes	42	4,076					
Financial Performance	No	58	3,376	-,11461	,09066	,209	-1,231	,218
	Yes	42	3,491					
Management Team	No	58	3,852	-,16256	,13060	,216	-1,440	,150
	Yes	42	4,014					

Table 19. Entrepreneurial experience, test shows if there is difference in the weighting of criteria groups between VCs with experience and without experience. *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001. 1 = not important; 5 very important.

4.5 Control Variable

For this study, a set of control variables has been established to ensure that the observed effects are not attributed to variables outside the scope of the study. Seven different control variables have been identified for this research, namely Development Stage, Industry Sector, Education, Age, Experience as VCs, Geographic location and Gender.

The first control variable is the development stage. Startups/companies go through different stages of development, each with unique challenges. In existing literature, no universal terminology is universally adopted to describe these lifecycle stages (Block, Fisch, Vismara, & Andres, 2019). In this investigation, the terms pre-seed, seed, series A, and series B are employed based on practical advice. Different sectors often have different characteristics. Therefore, the industry sector has been added as a control variable. The measurement includes categories such as Software, High-Tech, Fintech, Impact, Cleantech, MedTech, and others. Another control variable involves the educational background of the VCs. The measurement includes categories such as Intermediate Vocational, Bachelor's Degree, Master's Degree, Doctoral Degree, and others. The level of education may shape mental schemas (cognition) that influence the decision-making criteria (Ucbasaran, Westhead, Wright, & Flores, 2010). The age of VCs is identified as a control variable with the potential to affect various aspects of their behavior and cognition. The measurement includes the age of the venture capitalist. Age often correlates with the buildup of experience (Ucbasaran, Westhead, Wright, & Flores, 2010). Similar to the education level, the experience of VCs is considered a critical control variable. Experience in the VC industry can shape unique mental schemas (cognition), which affects the decision-making criteria (Ucbasaran, Westhead, Wright, & Flores, 2010). The measurement includes the number of years the participants worked as venture capitalists. Geographic location is also one of the control variables. This variable helps to control for differences, such as culture and market conditions. It is measured across different continents namely, Europe, Asia, North America. Lastly, the variable of gender is introduced as a control variable. Considering gender as a control variable aligns with ethical research practices and promotes inclusivity (Kim & Lee, 2022). These control variables contribute to the internal validity of the study. In this case, an Analysis of Covariance (ANCOVA) test is conducted to assess the control variables. ANCOVA combines the concept of a t-test with linear regression, allowing for the control of the influence of one or more variables. This is also referred to as a covariate or, thus a control variable. The reason this test was chosen is that there is no nonparametric test that includes the covariate in the analysis. It must be taken into account that the data are not normally distributed, and therefore, the p-values are somewhat less reliable. The covariate/control variable is a variable that may or may not influence the dependent variable. The results are presented in table 20.

			N	Mean	P-value Mann-Whitney U test (without control variable)	P-value AN(C)OVA (without control variable)	P-value ANCOVA with control variable
Industrial Market experience	Product/Service	No	22	3,400	,020*	<,001***	<,001***
		Yes	78	4,048			
	Market Competitive	No	22	3,918	,055	,042*	,178
		Yes	78	4,151			
	Financial Performance	No	22	3,273	,037*	,073	,121
		Yes	78	3,467			
	Management Team	No	22	3,927	,867	,953	,872
		Yes	78	3,918			
Top Management experience	Product/Service	No	73	3,896	,950	,784	,525
		Yes	27	3,933			
	Market Competitive	No	73	4,161	,023*	,032*	,029*
		Yes	27	3,933			
	Financial Performance	No	73	3,364	,032*	,028*	,021*
		Yes	27	3,589			
	Management Team	No	73	3,773	<,001***	<,001***	,001***
		Yes	27	4,319			
Entrepreneurial Experience	Product/Service	No	58	3,959	,078	,307	,479
		Yes	42	3,833			
	Market Competitive	No	58	4,117	,417	,672	,888
		Yes	42	4,076			
	Financial Performance	No	58	3,376	,218	,209	,204
		Yes	42	3,491			
	Management Team	No	58	3,852	,150	,216	,394
		Yes	42	4,014			

Table 20. The Mann-Whitney U test and AN(CO)VA analysis with the p-values. *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001.
1 = not important; 5 very important.

For hypothesis 1a (Industrial Market experience -> Product/Service), both without and with the control variable, the p-value is less than 0.001. This indicating a significant difference in the dependent variable (Product/Service) between the experienced and inexperienced groups. Adding the control variable has maintained significance. For hypothesis 1b (Industrial Market experience -> Market Competitive), without the control variable the p-values are ,055 and 0.042. Only the ANCOVA is significant (p > 0.05). However, with the control variable, the p-value is 0.178. Adding the control variable did not maintain the significance. This is the same for the Financial Performance group, where there is a significant difference in the Mann-Whitney U test but not in the ANCOVA test. In hypothesis 2 (Top Management experience -> Management Team), both without and with the control variable, the p-value is 0.001. This indicating a significant difference in the dependent variable (Management Team) between groups with different experience levels. Adding the control variable has maintained significance. For hypothesis 3 (Entrepreneurial experience -> Financial Performance) the p-values without control variables are ,218 and ,209. De p-value with control variable is ,204. Both variables are not significant (p > 0.05). It appears that the addition of the control variable has not made a significant difference in comparison with the analysis above. The result remains unchanged in all the hypothesis after adding the control variable.

5. Conclusion

In response to the research question and its sub-questions, this study offers insights into the relationship between venture capitalists' experiences and their decision-making criteria. The findings shed light on the complexity of the deal screening phase and have implications for both experienced venture capitalists and newcomers.

Sub-question 1: How do venture capitalists' Industrial Market experience, Top Management experience, and Entrepreneurial experience differ in their influence on decision criteria during the deal screening stage?

Based on the descriptive statistics, the majority of respondents had Industrial Market experience (78 respondents), while the least common experience was Top Management (27 respondents). Additionally, 42 respondents reported having Entrepreneurial experience.

The study reveals significant disparities in the impact of various experiences on decision criteria during deal screenings. Industrial Market experience emerges as a powerful influencer, with venture capitalists possessing industry knowledge prioritizing criteria such as product quality and financial performance. In the financial group, when a control variable is added, this relationship is no longer significant. Additionally, Top Management experience emerges as a crucial factor shaping decisions, extending beyond the assessment of Management Teams to encompass considerations of Market Competitiveness and Financial Performance. This underscores the profound influence of leadership experience on investment decisions. In contrast, Entrepreneurial experience fails to yield a significant difference between experienced and inexperienced individuals. This experience type appears infrequently in the literature. Yet existing literature challenges that suggests differences between venture capitalists with and without Entrepreneurial experience.

Figure 5 shows the adjusted conceptual model. The green lines indicate a significant difference in assessing the criteria between experienced and inexperienced investors. The dotted line signifies that this difference was not hypothesized in advance, but the research study still found a significant difference between experienced and inexperienced investors. The number in the brackets represents the difference between the two averages (experience and nonexperience). The plus sign indicates that experienced investors placed significantly more importance on a criterion than inexperienced investors. The p-value of the Mann-Whitney U test was examined in this figure. When the control variable was added, the p-values either remained the same or became even stronger. However, this

was not the case with Industrial Market Experience on the Financial Performance criteria group, where the significance did not remain constant when adding the control variables.

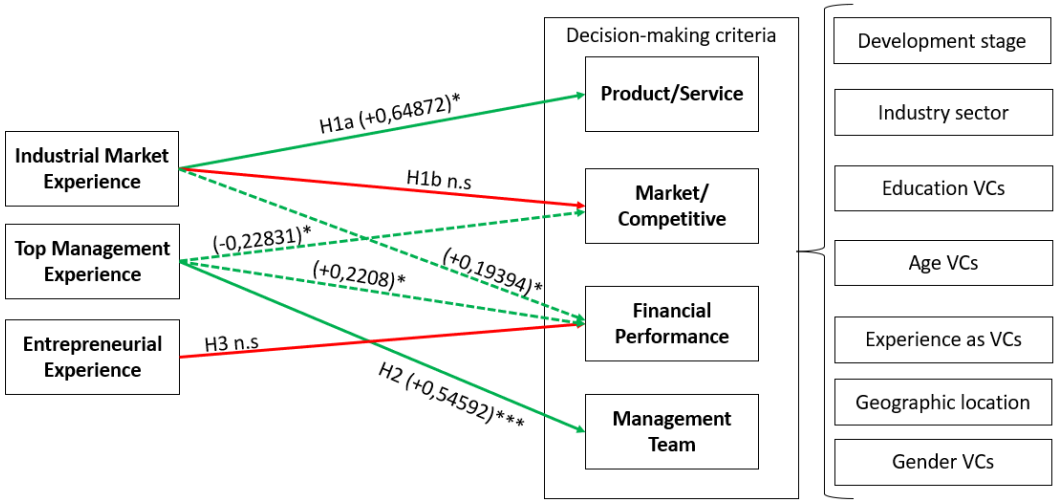

*Figure 5. Adjusted conceptual model. Green lines show significant differences between experienced and inexperienced groups. Red lines indicate no significant difference, while dotted lines signify unexpected but significant differences. Numbers in brackets show average differences. Mann-Whitney U test p-values were examined. When control variables were added, p-values stayed the same or increased, except for Industrial Market Experience on Financial Performance, where significance did not remain constant. P-values. *: P ≤ 0.05; ** : P ≤ 0.01; *** : P ≤ 0.001. N.S: not significant.*

Sub-question 2: What are the specific decision-making criteria that venture capitalists prioritize during the deal screening stage?

The study identified specific decision criteria that venture capitalists prioritize during the deal screening stage. When categorizing the four groups from most important to least important, respondents prioritized the Market/Competitive group as the most important, followed by the Financial group and then the Management Team group. The Product/Service group was considered the least important. When looking at the results where respondents had to assess each criteria individually, the rankings were slightly different than when they had to categorize the groups from most important to least important. The means for each group were calculated, revealing that the Market/Competitive group had the highest score (4.1), indicating it as the most important. Following that were the Management Team (3.92) and Product/Service (3.906) groups. The Financial Performance (3,424) group received the lowest score.

Within the Product/Service group, criteria related to scalability of the product or service received the highest score (4.46), while quality standards received the lowest score (3.61). In the Market/Competitive criteria group, market positioning and differentiation scored highest (4.45), while the level of competition in the market scored lowest (3.93). Regarding Financial Performance, growth potential received the highest score (4.52), while monitoring and administration costs received the

lowest (2.03). In the Management Team criteria group, knowledge about the sector was the highest scoring criterion (4.14), while entrepreneur feedback was the lowest (3.62).

Research question: ***How do different types of experience influence the importance of Venture Capital decision criteria during the deal screening stage?***

The study reveals that Industrial Market experience and Top Management experience significantly influence decision criteria during deal screenings, emphasizing Product/Service, Financial Performance, Market Competitiveness, and Management Team assessment. Surprisingly, Entrepreneurial experience shows no significant difference in decision-making, challenging existing assumptions. Looking at the Industrial Market experience, the experienced group gives more importance to the Product/Service criteria and Financial Performance criteria compared to non-experienced investors. With Top Management experience, the experienced group places greater emphasis on Financial Performance and the Management Team than the non-experienced group. The Top Management experience on Market Competitiveness criteria, the non-experienced group assigns more importance than the experienced group. The differences are significant. In conclusion, the study provides a comprehensive understanding of the specific decision criteria prioritized by venture capitalists during the deal screening stage. By understanding the priorities within each criteria group, venture capitalists can make more informed decisions, ultimately contributing to the growth and success of the ventures in which they invest.

6. Discussion

This research makes an important contribution to the existing literature by integrating the literature on the decision criteria of venture capitalists with cognitive theory. While numerous studies have investigated the experience of venture capitalists, there is a scarcity of research on the experiences individuals undergo before becoming venture capitalists. This prior knowledge is often deemed important, as some studies suggest that it influences investment outcomes (Gomper, Kovner, & Lerner, 2009) (Moritz, Diegel, Block, & Fisch, 2021). However, the specific emphasis of experienced individuals in their decision criteria remains largely unknown. This research addresses this gap by delving into the details of how various types of prior experience shape the decision criteria of venture capitalists and sheds light on the differences contributing to successful investment choices. This chapter will discuss both the theoretical and practical aspects.

6.1 Implication for theory

The research by Deventer & Mlambo (2008) and Portmann & Mlambo (2013) places significant emphasis on the entrepreneur and management team as the primary criteria for investment decision-making. This underscores the notion that the individuals behind a venture play a crucial role in its success and are therefore an important point for investors. Contrarily, my research suggests a different perspective. While acknowledging the importance of the entrepreneur and management team, the findings indicate that the Market Competitive criteria group garnered the highest score, followed by Management Team, Product/Service and finally, Financial Performance criteria. This suggests that, in the context of my study, investors may prioritize factors related to the market and competitive landscape over individual characteristics of the entrepreneur or management team. The reason for these differences might be that my research is based on different set of investors or a different geographical region where investors prioritize market competitiveness over individual entrepreneurial traits. Investor preferences can vary based on factors such as risk appetite, industry focus, and investment strategy.

In the context of cognitive literature that investigating prior experiences, this study reveals findings regarding the significance of different types of experiences in shaping the decision criteria of venture capitalists. The focus here is on the screening phase in the decision-making process.

The results indicate a significant difference between experience in the Industrial Market experience and the group with Product/Service criteria, as well as the group with Financial Performance criteria. The alignment of the observed importance placed on Product/Service criteria with the literature (Hopp, 2010) raises the question of why this relation exists. In this research, it was found that within the Product/Service criteria group, the criteria of scalability and growth potential

generally scored the highest (see table 15, paragraph 4.2). The emphasis on growth potential in the Product/Service criteria group suggests that investors within this category prioritize opportunities that not only provide valuable products or services but also demonstrate a capacity for substantial expansion in the market. They may perceive opportunities with scalability as capable of generating sustainable returns over time, enhancing the overall value of their investment portfolios. The observed significant difference between Industrial Market experience and the absence of experience within the Financial group suggests that this type of experience also influences other criteria groups. This relationship for the Financial group may not remain constant once control variables are introduced, suggesting that it might be influenced by other factors. However, the reason why this relationship could exists is because their knowledge from working in the industry shapes how they look at various aspects when deciding where to invest money (Ismail & Medhat, 2019). Individuals with Industrial Market experience may have a deeper understanding of the risks associated with different investment opportunities. The connection is like a ripple effect, where one type of experience can have a broader impact on how someone evaluates different investment criteria. On the other side, the literature suggested that investors with Industrial Market experience place greater importance on Market/Competitive criteria (Gompers, Kovner, Lerner, & Scharfstein, 2005). Professionals with Industrial Market experience often engage in thorough market assessments, evaluating factors such as market size, growth potential, competitive intensity, and barriers to entry. However, this part of the literature does not align with the current findings of this research. While there is a difference between experienced and inexperienced individuals, it does not reach statistical significance (p-value: 0.055). Nevertheless, the difference is marginal, and achieving significance was nearly attained. Differences in the sample size between the literature and the current research could contribute to the observed discrepancy. If my research study had more respondents, it might have been significant.

Regarding Top Management experience, the findings reveal a significant difference between individuals with prior experience and those without experience. This distinction applies to the criteria groups Market/competitive, Financial Performance, and Management Team. In contrast to the literature, which initially suggested significant differences only in the Management Team criteria group (Zarutskie, 2010) (Franke et al, 2006). This study emphasizes that individuals with experience in Top Management not only make distinctive choices in the Management Team but also in Market Competitiveness and Financial Performance assessments. This might indicate that individuals with Top Management experience are more likely to follow established principles and best practices. People with experience in top management often bring with them a strategic mindset that they have improved in their leadership roles (Nikolaus, Gruber, Dietmar, & Henkel, 2008). Looking to the Market Competitive group, there given the non-experience group more importance to these criteria than people with Top-Management experience. Individuals with Top-Management experience may focus on

a broader range of strategic considerations, which could include aspects beyond immediate market competitiveness. Their strategic mindset might lead them to weigh various factors such as financial performance and overall management strategy, potentially at the expense of giving less emphasis to specific market competitive criteria. Exploring the Management Team criteria group (hypothesis 2), it is evident that the specific criteria dealing with honesty/integrity and knowledge sector generally received the highest scores. Expertise in the knowledge sector may be viewed as essential for making informed decisions and leading the team effectively. Investors may recognize the importance of these criteria in ensuring the long-term viability and success of a venture (Walske & Zacharakis, 2009).

Entrepreneurial experience, on the other hand yielded unexpected results. No significant difference was observed between experienced and inexperienced individuals. This contradicts existing literature, which suggested substantial differences between venture capitalists with and without Entrepreneurial experience (Franke N. , Gruber, Harhoff, & Henkel, 2006) (Franke, Marc, Harhoff, & Henkel, 2008). There are research studies that say this experience type can say something about an investor's behavior. However, it was difficult to find good literature that could properly describe this experience on decision-making criteria. Afterwards, my research study also found that there is no difference in experienced and inexperienced people. Nevertheless, these findings contribute valuable insights to existing literature by providing a better understanding of the diverse impact of different types of prior experiences on decision criteria. The unexpected results regarding Entrepreneurial experience underscore the need for ongoing exploration of the understanding of how various experiences shape the decision-making process of venture capitalists.

In conclusion, this study complements the cognitive literature on prior experiences by clarifying the distinctive impact of Industrial Market, Top Management, and Entrepreneurial experiences on the decision criteria of venture capitalists. The results challenge preconceived ideas and encourage further research in this field, leading to a better understanding of the factors that shape investment choices during the screening phase.

6.2 Implication for practice

The acknowledgment that building meaningful experiences in the venture capital landscape takes time underscores the importance of understanding how investors, especially young and ambitious ones, can make good investment decisions even in the absence of prior experience. While the saying "experience is the best teacher" holds true (Thomas & Cheese, 2005), the practical aspects of venture capital need an exploration of how individuals without a predetermined knowledge base navigate the complexity of investment decisions. Practically speaking, the findings have implications for both more experienced venture capitalists and newcomers. For experienced individuals, the

awareness of how specific experiences influence decision criteria provides the opportunity to refine strategies. For example, when investors have prior experience in Top Management, they tend to place more emphasis on Management Team criteria when assessing potential investments compared to less experienced counterparts. This awareness allows more experienced investors to mitigate potential biases that may arise from their past experiences. These experiences shouldn't overshadow other critical factors in investment decision-making. Therefore, more experienced individuals can balance their experience with a broader perspective, ensuring they consider all relevant aspects of a potential investment opportunity. Meanwhile, newcomers can benefit from the insight that certain experiences may not significantly influence the decision-making process, such as Entrepreneurial experience. Newcomers don't necessarily need to focus their time and effort on acquiring skills in this particular area. Instead, they should prioritize gaining skills in areas like Industrial Market experience and Top Management experience. For instance, venture capitalists with Industrial Market experience will put more importance on Product/Service criteria, while those with Top Management experience will prioritize Management Team criteria compared to less experienced counterparts. Recognizing how specific experiences shape decision-making criteria provides newcomers with valuable guidance on where to direct their attention and efforts during deal screening.

The research revealed significant differences in the influence of various experiences on decision criteria during the deal screening phase. Notably, experience in the Industrial Market has a substantial impact, indicating that venture capitalists with industry knowledge value certain criteria, such as product quality and financial performance, more highly. Experienced venture capitalists may channel their efforts into deepening their understanding of these aspects to make more informed and effective investment decisions. On the other hand, investors without specific industrial market experience have the opportunity to diversify their skill development (Dimov. & Martin de Holan, 2010). They can focus on building competencies that align with criteria highly valued by their more experienced counterparts. In this context, these key criteria include Product/Service evaluation, Financial Analysis, and potentially Market Competitiveness. By developing these skills, inexperienced investors can strategically position themselves for success in deal screenings within the venture capital landscape.

According to the results, Top Management experience is a crucial factor that influences multiple decision criteria, especially when compared to less experienced counterparts. It goes beyond merely affecting the assessment of the Management Team and extends to considerations of Market Competitiveness and Financial Performance. Individuals with Top Management experience is likely to prioritize strategic choices and place emphasis on the valuation of management team and financial viability. Professionals with Top Management experience can actively contribute strategic insights during investment discussions. Their ability to assess management team and financial viability adds

depth to the decision-making process, benefiting both the venture capital firm and the companies in which they invest (Miloud, Cabrol, & Aspelund, 2012). Newcomers (investors without prior experience) should prioritize skill development in top management areas, focusing particularly on aspects such as financial analysis, industry understanding, and team dynamics. While they may lack direct Top Management experience, developing a well-rounded skill set will contribute to their effectiveness in evaluating investment opportunities.

Contrary to expectations, the research findings reveal that entrepreneurial experience does not yield a significant difference in decision-making between experienced and inexperienced individuals. Surprisingly, this experience type does not seem to play a decisive role in how investors make choices. It's possible that the quality or nature of Entrepreneurial experience varied widely among participants, with some individuals having more relevant or impactful experiences than others. Or maybe inexperienced venture capitalists may possess a greater capacity for learning, allowing them to quickly acquire and apply new knowledge in decision-making contexts. This adaptability could offset any advantage conferred by prior entrepreneurial experience. Ultimately, based on this research study, there may not be a convincing reason to further investigate the impact of Entrepreneurial experience on venture capital decision-making.

The focus shifts towards understanding the precise factors that differentiate investors without specific knowledge from their experienced counterparts. Young and ambitious investors, driven by the desire for immediate success, often struggle with quickly refining their decision-making skills. This leads to research into whether cognitive processes, experience, or alternative knowledge sources play pivotal roles in guiding their choices during deal screenings. Unraveling the cognitive approaches of beginning investors becomes an important part of understanding their investment decision-making processes. An important question is, for example, whether different cognitive mechanisms compensate for the lack of prior experience? It has already been mentioned in this chapter that it might be possible to further develop skills for investors without having any experience. However, this does not necessarily have the same effect as years of experience in, for example, Top Management.

Exploring these cognitive aspects provides valuable insights into the strategies employed by individuals in making investments in their venture capital careers. Researching how beginning investors excel without prior experience also opens doors for educational and mentoring. Are there specific areas of knowledge or skills that, can speed the learning curve for future venture capitalists? This would mean that you don't necessarily need years of experience to reach a certain level of thinking. Identifying these areas can lead to targeted education programs and mentoring.

The findings of this research are not only relevant to venture capitalists but also hold implications for entrepreneurs. Entrepreneurs can utilize this research to gain valuable insights into the factors that are likely to influence investment decisions. For entrepreneurs seeking investment, understanding these insights can provide valuable guidance in shaping their pitches. One practical tip for entrepreneurs is to align their proposals with the criteria that hold greater importance to investors, such as Market/Competitive criteria. This involves aspects like market differentiation (4,45) and market size (4,06), which received the highest scores among investors in this research study (refer to table 15, paragraph 4.2). Additionally, scalability and growth potential emerged as key considerations for investors, scoring highly in importance (4.46). To effectively incorporate these criteria into their pitches or proposals, entrepreneurs should highlight their market differentiation strategies and showcase the potential market size for their product or service. They should also outline their plans for scalability and growth, demonstrating how their business model can adapt and expand in response to market demands.

In conclusion, this research has practical implications for those entering the venture capital arena and the industry as a whole. For newcomers, understanding pathways to successful decision-making without prior experience provides a strategic roadmap for skill development. Additionally, for experienced venture capitalists, it underscores the potential for continuous refinement and enhancement of decision-making processes. By recognizing that expertise can be developed and enriched over time, both newcomers and experienced professionals can benefit from ongoing learning and skill enhancement in the field of venture capital (Shepherd, Zacharakis, & Bardon, 2003). This research also offers entrepreneurs valuable insights into the key factors shaping investment decisions, enabling them to better align their proposals with investor priorities and increase their chances of receiving funding.

7. Limitations and future research

This chapter discusses the limitations encountered in the study and proposes potential areas for future investigation. Despite the effort put into the research, certain limitations emerged that could affect the interpretation and applicability of the findings. Additionally, potential avenues for future exploration are identified.

Decision-making process; screening stage: The research primarily focuses on the decision-making phase during deal screenings. Other stages of the venture capital process, such as deal sourcing and evaluation, may also significantly influence investment success and are not have been fully addressed in this research. Future research could delve into these stages in greater depth to uncover their influence on investment decisions. This could involve examining the effectiveness of different deal sourcing strategies, exploring the criteria and methodologies used in investment evaluations, and identifying best practices for optimizing these processes. By gaining a deeper understanding of deal sourcing and evaluation practices, researchers can inform and enhance venture capital investment strategies, ultimately contributing to improved investment outcomes.

Geographic/culture limitations: Another limitation is the cultural and geographic constraints. The study may not account for cultural or geographic differences that could affect venture capitalists' decision criteria. What is considered valuable experience may vary based on cultural backgrounds and regional market conditions. In this research there is a control variable named geographic location. But most of the venture capitalist came from Europe, namely 96 out of 100 respondents. With this amount of people from Europe you cannot compare them very well with other continents. Future research endeavors should strive to incorporate more diverse samples to better capture the range of cultural and geographic factors that may impact venture capital decision-making.

Developing skills instead of experience: One possible route for new investors without prior experience could be to gain skills equivalent to Industrial Market and Top Management experience through educational programs. This could be achieved, for example, by taking courses to reach certain levels of thinking. However, the question that arises here is whether taking such classes has a similar effect as gaining practical experience over several years. Thus, while educational programs can serve as valuable supplements to experiential learning, they may not entirely substitute for the insights gained through years of practical involvement in venture capital activities. Understanding the comparative effectiveness of educational programs versus practical experience in shaping investment decision-making is an important area for future research studies. Additionally, investigating the potential

synergies between formal education and practical experience could inform the design of integrated learning approaches that maximize the development of venture capital professionals.

Recent success and past success: Future research could explore the balance between learning from recent experience and past experiences in venture capital decision-making. Bacon-Gerasymenko's study (2019) suggests that learning from recent success is more beneficial than learning from experience in the past. If venture capitalists rely too much on old experiences, it can lead to poor investment choices. Further investigation is needed to understand how venture capitalists can effectively integrate insights from both recent experience and past experiences. This could involve conducting longitudinal studies to track how venture capitalists' decision-making processes evolve over time and examining the relative impact of recent successes and past experiences on investment choices. Additionally, qualitative research methods such as interviews or case studies could provide deeper insights into how venture capitalists perceive and utilize different sources of learning in their decision-making processes. By exploring the interplay between recent experience and past experiences, future research can contribute to a more comprehensive understanding of effective decision-making strategies in venture capital.

Interpretation of experiences in VC research: Venture capitalists may interpret or present their experience differently, which may affect the accuracy of the data collected. Experiences are subjective events, and individuals may interpret the same event in different ways based on their personal beliefs, attitudes and perceptions. Two venture capitalists with similar experiences may assign different meanings and value judgments to those experiences. When recalling experiences, venture capitalists may tend to recall selectively, emphasizing certain aspects of their experience and forgetting or minimizing others. Furthermore, future researchers may consider conducting longitudinal studies to track changes in venture capitalists' experiences and decision-making processes over time. By examining changes in experiences and decision-making behaviors over time, researchers can identify patterns, trends, and influencing factors that may not be apparent in cross-sectional studies.

Composition of the startup team: In some research studies assessing choice criteria in the screening phase, a sub-question was added relating to the composition of the startup team. For instance, Macmillan's (1987) research study included a question in the survey about whether venture capitalists consider team composition as a criterion. His study indicated that 42% of respondents believed a balanced team was essential. This suggests that venture capitalists look for teams that include individuals from diverse disciplines. Morauzzynski's (2020) study focuses only on criteria related to the entrepreneur/management team. Here, the ideal composition of a startup team is discussed in greater

detail, including the necessary skills inside a team such as market knowledge or financial expertise. Since I discovered this later, it was not included in my research study. In future research studies, the composition of a team could be considered as a criterion. For example, this could be categorized under the Management Team group. Alternatively, it could be added as an additional question to explore how such a composition should be constructed.

Getting effective response in research studies: In this research study, I found it quite difficult to obtain many respondents. My first piece of advice for other students is to approach people mostly personally, for example through LinkedIn and/or email. Another method that I have not used myself is to utilize the PitchBook platform. I have observed in other research studies that people use it as well. PitchBook contains data such as email addresses, types of investors, or educational backgrounds. With PitchBook, it might have been easier to quickly involve many people in the research study. I attempted to create an account myself, but it didn't work. However, I must admit that I also did not look into it very carefully because by then I had almost enough respondents for my research study.

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Appendix 1: Questionnaire

Dear reader,

First, I would like to thank you very much for participating in this survey. I am a Master Business Administration student at the University of Twente. For my thesis I am researching the possible relationship between the different types of experience of the Venture Capitalist on the decision-making criteria.

The research question is:

"How do different types of experience influence the weighing of Venture Capital decision criteria during the deal screening stage?"

The survey consists of 45 questions and will take about 10 minutes of your time. The questions range from open-ended to closed questions. Your data will be handled reliably, and the results will be processed completely anonymously. The data collected will be stored safely and only accessed by the researcher.

If you have any questions or concerns regarding the survey, please feel free to contact me at j.a.m.kooiker@student.utwente.nl. Once again, thank you for your participation.

With kind regards,

Juliët Kooiker
Master of Business Administration
University of Twente

Introduction (and control variable) questions

Q1: Can you specify your current position within the VC firm?			
Analyst	Principal	Partner	Others (fill in)
Q2: How long do you work as a venture capitalist?			
(Fill in, time in years)			
Q3: In which gender category do you identify?			
Men	Women	Other	
Q4: What is your age?			
(Fill in)			
Q5: What is the highest level of education you have attained?			
Intermediate Vocational	Bachelor's degree	Master's degree	Doctoral degree	Others
Q6: Which country do you come from?			
Netherlands	Germany	France	Others (fill in)
Q7: In which industry sector do you invest the most?			
Software	High-tech	Fintech	Impact	Cleantech	MedTech	Others (fill in)
Q8: Which development stage do you typically invest in. Feel free to select multiple stages if applicable?			
- Pre-seed (Problem/solution fit, product development)			
- Seed (Go-to-market, product/market fit)			
- Series A (Business model fit)			
- Series B (Growth)			
Q9: What is the typical deal size range you consider for investments?			
under $1 million	$1 million – $10 million	above $10 million	
Q10: Do you have specific geographic preferences for investments?			
Local/regional	National	International	No, I don't
Q11: How do you approach portfolio diversification? (multiple answers are possible)			
Diversify across industries	Diversify across development stages	Diversify across countries	Concentrate investment in specific area (e.g., industry)

Industrial market experience questions

Q12: Have you actively built practical knowledge, skills, and expertise through direct involvement in the industrial sector where you currently invest as a Venture Capitalist?	
Yes	No
Questionnaire goes to Q14 who fill in "No."	
Q13: How many years of experience do you have as a venture capitalist in the same industry you currently invest in?	
(Fill in, time in years)	
Q14: How extensive is your professional network within the industrial/market sector you invest in?	
Well-established	Moderate network	Limited network
Q15: Have you been directly involved in the day-to-day operations or management of companies within the industrial/market sector you invest in?	
Actively involved	Involved to some extent	Limited or no direct involvement

Top management experience questions

Q16: Have you held C-suite positions such as CEO, COO, CFO, CMO, CTO, or other leadership roles within organizations before becoming a venture capitalist?	
Yes	No
Questionnaire goes to Q20 for those who fill in "No."	
Q17: How many years have you collectively spent in top management positions before becoming a venture capitalist?	
(Fill in, time in years)	
Q18: How many distinct leadership roles or C-suite positions have you held before transitioning into venture capital?	
(Fill in amount)	
Q19: How divers have your leadership roles been in terms of functional areas (e.g., operations, finance, marketing) before entering venture capital?	
Held leadership roles in multiple functional areas	Primarily focused on one functional area

Entrepreneurial experience questions

Q20: Have you been directly involved in the process of starting, launching, and running your own business(es) prior to becoming a venture capitalist?		
Yes	No	
Questionnaire goes to Q24 for those who fill in "No."		
Q21: How many years have you collectively spend starting, launching, and running your own business(es)?		
(Fill in, time in years)		
Q22: How many start-ups have you been involved in, considering both successful exits and valuable experiences that contributed to your expertise in entrepreneurship?		
(Fill in total number)		
Q23: How would you characterize the success of your entrepreneurial ventures?		
Highly successful	Moderate successful	Limited success

Decision-making criteria

The following questions are centered around ranking different criteria on a scale from "Very Important" to "Not Important." Your task is to carefully assess each criterion and determine its level of importance in your decision-making process. By ranking these factors, we aim to gain deeper insights into the priorities and considerations that guide your investment choices. The criteria are about the screening phase of the decision-making process.

Q24: How important is …..? of a potential investment in your decision-making process?	**Not important**	**Less Important**	**Neutral**	**Important**	**Very important**
Assessment of Product/service					

The uniqueness and technological innovation of the product/service					
The scalability and growth potential					
The product/service includes quality, standards and performance					
The level of intellectual property protection					
The alignment of the product/service with current market trends					
Assessment of market/competitive					
The level of competition within the target market					
The market positioning and differentiation strategies in comparison to the competitors.					
The analysis of potential market barriers and entry challenges					
The assessment of market trends and future projections					
The assessment of the market size					
Assessment of financial performance					
The profitability and margin potential of the venture					
The venture will ensure a return on investment					
The assessment of the growth potential of the venture					
There will be no follow-up investment required					
The investment will require low monitoring and administration costs					
Assessment of management team					
The venture's team has a successful track record					
The entrepreneur or venture possesses excellent management and leadership skills/experience.					
The management team offers reports and feedback on performance.					
The management team possesses good knowledge of the sector.					
The management operates with honesty and integrity.					

44. Please rank the following four categories from most important (1) to least important (4) based on your preferences. Assign a higher rank to the category you believe is most crucial in venture capital decision-making, and lower ranks to less important categories.
Assessment of product/service
Assessment of market/competitive
Assessment of financial performance

Assessment of management team

45. Is there anything else you would like to add or any additional comments you would like to share regarding your experiences or insights related to venture capital decision-making?
(Fill in)

Appendix 2: Feedback questionnaire

This appendix contains a summary of feedback from the reviewer who was contacted. The reviewer himself works in the venture capitalist industry and took time to review the survey.

Q1: Position and Career Path

The reviewer suggests exploring the positions within a VC firm, emphasizing that analysts, principals, and partners play distinct roles in decision-making. Additionally, the reviewer proposes investigating individuals' career paths, considering transitions from an analyst to a partner or from a founder to a partner. This insight could be gathered through LinkedIn profiles or direct inquiries.

Q6: In which industry sector do you invest the most?

The reviewer finds the chosen industry sectors somewhat overlapping, suggesting a more refined categorization. Instead of combining Software and Information Technology, the reviewer recommends using categories like Software, High-Tech, Fintech, Impact, Cleantech, MedTech, and Other for a more nuanced understanding.

Q7: Which development stage do you typically invest in?

The reviewer raises concerns about the broad interpretation of Seed and Early-Stage, suggesting that these terms can be ambiguous in practice. The reviewer proposes considering distinctions such as (Pre-Seed), Series A, Series B, and multiple selections for investors involved in various phases.

Q8: What is the typical deal size range you consider for investments?

The reviewer questions the definition of "average" in the deal size range, recommending specifying a range like €1-5M with a sweet spot at €2M for the initial ticket. This clarification could provide more meaningful insights into reviewer preferences.

Q11: What is your typical investment horizon?

The reviewer notes that the question about the typical investment horizon may not be relevant when focusing on venture capitalist, as most funds have a standard lifetime of 10 years and an investment period of 5 years. Therefore, the investment horizon typically ranges from 5 to 7 years.

Q22: How many start-ups have you successfully completed and led before becoming a venture capitalist?

The reviewer wants to better understand what I mean by "successfully completing startups." The reviewer suggested considering experiences that may not necessarily result in great success or exit but still contribute to the person's expertise in entrepreneurship. In simpler terms, the question is asking how many businesses the reviewer has been involved in, even if they didn't all become wildly successful. It's about recognizing valuable experiences that have shaped their understanding of entrepreneurship, regardless of whether those businesses reached a major milestone or not.

Note: The reviewer's feedback was carefully integrated into the survey. This integration played a crucial role in refining the questionnaire and improving its overall relevance and accuracy.