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The Influence of Non-financial Factors on Brazilian Individual's Investment Intention Towards Impact Investing

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Abstract

This study aims to explore and comprehend factors influencing Brazilian individuals' intention toward impact investing. The theoretical framework of this project builds upon the Theory of Planned Behaviour and integrates Risk Aversion, Social Preferences, Professional Financial Experience and Sex as explanatory variables of intention towards impact investments. In order to assess the impact that non-financial factors have on the investment intention the project developed a quantitative study employing Partial Least Square Structural Modelling on a non-probability sample of 254 Brazilian individuals. The results point out a significant positive effect of Attitudes, Subjective Norms, and Perceived Behavioural Control on investment intention towards impact investments. Furthermore, the study reviews a significant indirect effect of Social Preferences and Sex on investment intention. Finally, the research contributes by extending the knowledge on investment behaviour intention towards impact investments in a region slightly explored and opens space for researchers to further explore additional factors within Impact Investing context.

Keywords: Impact Investing, Theory of Planned Behaviour, Investment Intention, Social Preferences, Risk Aversion, Brazil

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1. Introduction

The primary objective of the introduction chapter is to set the stage for the research and pave the way for subsequent exploration and discourse on the central themes, as well as the rationale behind undertaking this study. The chapter is divided into subsections that will present the research background. Thereafter, a narrative literature review about Impact Investing is developed to give general knowledge and enable the limitation of the project scope. Then, an analysis of research areas is carried out to delineate research gaps and relevant themes for further investigation. Finally, the research question is presented.

1.1 Research Background

The world is facing environmental and societal challenges. The development of the globalised world lays pressure on natural resources and the Earth System's stability (Steffen et al., 2015). Meanwhile, communities and populations across the globe live in different realities regarding basic needs and rights (UNDP, 2022).

In 2015, the General Assembly of the United Nations released the "*Transforming our World: the 2030 Agenda for Sustainable Development*". It is an action plan calling on all stakeholders to act upon the biggest challenges in the world. The document is organised into 17 development goals and 169 sub-targets with indicators to be achieved by 2030. (*Transforming Our World: The 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs*, n.d.)

The Sustainable Development Goals (SDGs) provide a comprehensive framework for tackling significant challenges, compelling stakeholders to take measures and fostering the mobilisation of capital within specific focus areas. Their purpose is to stimulate action and promote positive change towards sustainable development goals. For

instance, UNCTAD (2014) forecasted that $2,5 trillion yearly is necessary to be invested to achieve the targets towards 2030. Hence, achieving sustainable development goals relies on the integrated effort of all stakeholders as recognized by the UN (*Transforming Our World: The 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs*, n.d.). Within the realm of stakeholders lie the private investors, comprising both institutions and individuals, who bear the responsibility of channelling private resources to finance solutions for these challenges.

1.1 Problem Formulation

Recent years have witnessed a noticeable surge in scholarly research focusing on Socially Responsible Investments (Chalissery et al., 2023). Simultaneously, Clarkin & L Cangioni (2016) acknowledge the expansion of Impact Investing practices, despite a limited body of literature on the subject. Meanwhile, Migliavacca et al. (2022) demonstrate significant growth in publications about Impact Investing, particularly after 2016.

The following table (Table 1) highlights the most relevant literature review found on unstructured search on Google Scholar between the publication years of 2018 and 2023 (last 5 years and current year) purposely listed in descending order of publication year and relevance of the theme. The keywords used in the search were “Impact Investing" and “Responsible Investing”. According to Talan and Sharma (2019), these terms are used interchangeably by academics and practitioners.

Author	Theme	Methodology
Chalissery et al., 2023	Socially Responsible Investments	Bibliometric Literature Review
Migliavacca et al., 2022	Impact investing	Bibliometric Literature Review
Dordi et al., 2021	Impact Investing	Bibliometric Literature Review
Schätzlein et al., 2020	Impact Investing	Systematic Literature Review
Jayaram and Singh, 2020	Sustainable Finance	Systematic Literature Review
Talan and Sharma, 2018	Sustainable Investing	Systematic Literature Review

Table 1. Relevant Literature Review. Table by author.

Chalissery et al., (2023) identified four research clusters within Socially Responsible Investments: Performance Evaluation; Investor Perspective; Corporate Perspective; and Political, social, and environmental perspective. For instance, Political, Social and Environmental perspective addresses social concerns and factors leading to behaviour. Moreover, the analysis reveals a recent focus on empirical and financial market-related studies while decision-making processes research was not identified in 2020. Finally, the authors identify a gap in research between developed and developing countries across the above-mentioned clusters.

Likewise, Migliavacca et al. (2022) identified four clusters within impact investing research, namely: Overview, Case Studies, Impact Investing tools, and Multidisciplinary. The last stands out as the least explored and most promising research area and it contemplates the combination of Impact Investing with behavioural finance, financial inclusion, sociology, ethics, or faith-based finance. Also, according to the authors, developing countries are underserved in terms of research.

Similarly, Talan and Sharma (2018) point out that mere 9% of the studies centres in developing countries. In addition, the emerging and frontier markets are not relevant in terms of capital invested toward impact. This remark opens space to understand the reasons behind the market underdevelopment, the relevance, and the scope of impact investing for these regions.

Further, Impact Investing research is still flourishing. Dordi et al. (2021) suggest that tailormade theoretical frameworks should be applied to develop the field. Also, Schätzlein et al. (2020) expose that impact investing research is interdisciplinary and described by a high level of theoretical engagement. They accentuate the scarcity of studies focusing on the investees. Additionally, it is pertinent to recognize that impact investing constitutes a sub-theme within the realm of responsible investments (Jayaram and Singh, 2020).

Hence, building upon the insights provided by Migliavacca et al. (2022), this study intends to adopt a Multidisciplinary route of study. More precisely, this research seeks to explore and address existing gaps in the literature while unveiling new pathways related to investors' behaviour in the realm of impact investing. Referring to the insights of Chalissery et al. (2023), this project aims to delve into research situated in the Political, Social, and Environmental domain.

Thereafter, a comprehensive search was conducted on the Scopus/ Elsevier Database to discern relevant articles concerning preference and behaviour towards sustainable investments' sphere. The following table illustrates the results obtained (articles appear in more than one search):

Database	Key Words	Results	Selected	Period
Scopus	"Sustainable Investments";"Preferences"	34	6	From 2018 to 2023
Scopus	"Impact Investing"; "Preference"	11	3	From 2018 to 2023
Scopus	"Responsible Investments"; "Preference"	51	6	From 2018 to 2023
Scopus	"Sustainable Investments"; "Behavior"	48	7	From 2018 to 2023
Scopus	"Impact Investing"; "Behavior"	23	5	From 2018 to 2023
Scopus	"Responsible Investments"; "Behavior"	95	10	From 2018 to 2023

Table 2. Scopus search results. Table by author.

That said, several articles have been investigating the investors´ preferences and factors influencing their behaviour regarding impact investments. A relevant amount of factors were studied and identified presenting congruent and conflicting findings among the studies (See chapter 3.1.1). A disseminated perception among researchers is the need to expand studies about investors' preferences and behaviour to other populations to increase knowledge and enable comparisons (Patzold et al., 2022; Rathee and Aggarwal, 2022; Shanmugam et al., 2022; Bauer et al., 2021; Gutsche et al., 2021; Lagerkvist et al., 2020). Further, future research resembling demographic factors influencing the intentions and behaviour towards Sustainable Investments is proposed (Krupa et al., 2020; Delsen and Lehr, 2019)

Furthermore, a latent opportunity lies in examining investors' intentions towards impact across various countries, considering the potential influence of their cultural and socioeconomic disparities (Rathee and Aggarwal, 2022; Bauer et al., 2021; Gutsche et al., 2021). Moreover, scholars recommend conducting research on the influence of social norms on the mobilisation of private capital towards sustainable investment alternatives. (Gutsche et al., 2023). Also, there are suggestions to amplify the understanding of the

effect of information and risk-taking behaviour, cognitive bias; and knowledge on the investor's intention toward responsible investments (Shanmugam et al., 2022; Delsen and Lehr, 2019). Yet, as previously mentioned, warm-glow feelings may exert influence on investors' inclination towards sustainable products. Therefore, it presents an avenue worthy of exploration within various populations (Bauer et al., 2021; Rossi et al., 2019).

Lastly, the identified studies have delved into various factors that impact investors' behaviour, exploring these factors across different studies and populations. Arguably, this diversity of methods and population may resonate with the heterogeneity of obtained results which lack integration and comparability. Also, research has been developed and focused on a limited set of countries (Developed Countries and India).

Thus, this project aims to investigate non-financial factors affecting the investors' intention towards impact investing by building upon the Theory of planned Behaviour incorporating investors' risk and social preferences, given the reported potential effect they have on investment intention. The first is inherent to investment decisions while the second is usually ignored by financial market professionals (Rathee and Aggarwal, 2022; Gutsche et al. 2019, 2023; Bauer et al., 2021). Yet, the study will focus on Brazilian investors, a population that has received relatively limited attention from scholars but holds relevance within the international context. Since Brazil is a member of the BRICS (Brazil, Russia, India, China, and South Africa), boasting a population of over 200 million and ranking as the 12th largest global economy in 2022 (Statista, 2023).

1.2 Research Question

Although all the main elements, including the research goal, were introduced, it is difficult to interpret a conglomerate of information and coordinate it in a logical sequence that led to a definitive answer. Also, if not organised, it is natural to lose focus on the goal

and arise with methodological work or findings irrelevant to the research. That said, a research question is a tool that provides a direct way of framing the research interest and transferring the idea to others (Hiebert et al., 2023). Thus, the following research question was developed to guide the project:

How do non-financial factors influence Brazilian individual investors' intention to invest in impact investments?

To answer the research question effectively, it is essential to articulate and advance several defined steps. Initially, a robust methodology (Chapter 2) has to be established alongside a Literature Review on the topic and theoretical framework (Chapter 3). Moreover, a crucial aspect involves the development of a valid questionnaire to systematically gather data for subsequent analysis. Finally, the results of the questionnaire will be discussed alongside relevant literature to address the research question.

The project's ultimate goal is to understand to which extent non-financial factors influence Brazilian individuals' intention of investing in impact investments. Thus, generating valid academic knowledge to fill research gaps and insights for financial market participants and policymakers to embrace initiatives to leverage catalytic capital through impactful investment products.

2. Methodology

A clear elucidation of the researcher's perspective and underlying decisions is crucial for stakeholders, including academics, students, practitioners, and others. As such, this section presents the research design, followed by a methodological viewpoint and a

discussion on the philosophy of science. Additionally, an in-depth explanation of the chosen methodologies and data collection processes is offered, alongside a straightforward acknowledgement of the research limitations.

2.1 Research Design

According to Kuada (2012), the research design is expressed as an action plan of sequential activities organised in a logical disposition. The choices and format are made at the researchers' discretion but must be carefully justified by connecting reasons and options coherently to the project objective.

The subsequent diagram delineates the four levels that research methodologies should undergo to achieve an appropriate research design (Kuada, 2012).

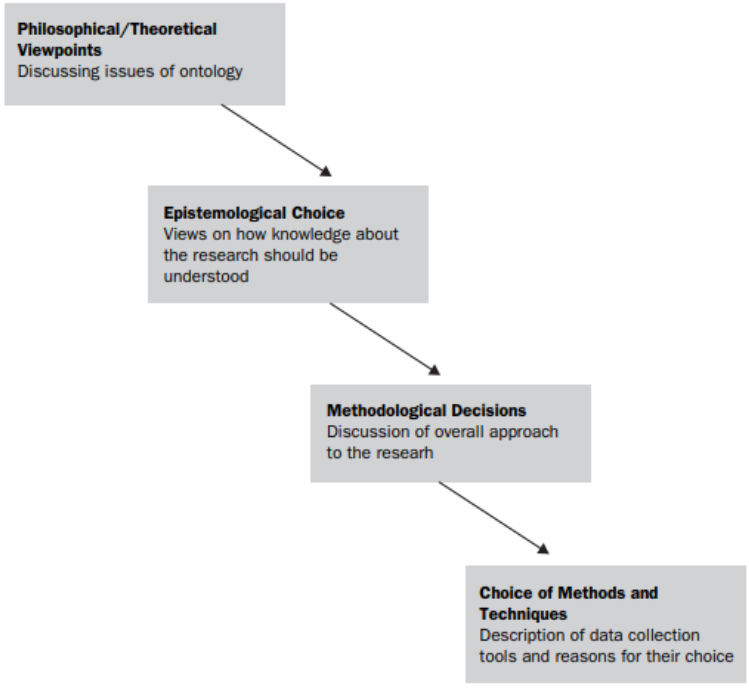

Fig. 5.1. Structure and Levels of Discussion in a Methodology Chapter

Fig. 1. Structure and Levels of Discussion in a Methodology Chapter. Extracted from Kuada (2012, pg. 58).

The subsequent section presents an elaborated and comprehensive discussion regarding the initial two steps proposed by Kuada. These steps aim to establish the project's philosophical viewpoint on the concepts of reality, its existence, and the nature of knowledge, while also establishing their interconnection with the appropriate paradigm.

2.2 Philosophy of Science

It may be intuitive and seems natural that different individuals hold distinct interpretations of ordinary events in daily life. Many of the divergences occurring between individuals routinely have low to no critical relevance. Nonetheless, researchers must be aware and attentive to the lens through which they perceive the world and the fundamentals of the facts they investigate, as this perspective influences the chosen research methodology and, consequently, the conclusions.

Arbnor and Bjerke (2009) citing Kuhn (1970) explains that each field of research has common features and understandings of reality, processes, and questions. Two concepts emerge as critical spheres of thinking, and consequently, shape methods of research.

Ontology can be explained by the description of the nature of the phenomenon in the study. In other words, it is the process of clarifying the source of the object in the study and defining its reality (Jacquette, 2002). For instance, the occurrence of such events may seem independent from human actions and definitive in essence, or as a social construction inherent to human relations and mutable in time and space (Kuada, 2012).

On the other hand, Epistemology concerns the knowledge construction process. It intends to define what constitutes knowledge about one subject and the means of achieving the state of knowledge (Kuada, 2012).

These general sets of features and beliefs form a paradigm such as constructivism and positivism. The first relies on the assumption that person and reality are inseparable (Ontology), and knowledge (Epistemology) is socially constructed dependent on the interpretation of the individual. The second admits that reality is identifiable and measurable with no space for interpretation and is dependent on reliable procedures of acquiring knowledge such as those in natural sciences (Arbnor and Bjerke, 2009).

Yet, a third paradigm, critical realism, emerges from Roy Bhaskar (1975, 1979). This paradigm views reality as observable and experienced in the real world while dependent on context and subjective to the researcher's interpretation. In fact, it adds layers of analysis recognizing empirical findings while taking into consideration external or adverse factors influencing the experiment and possibly limiting the findings to specific circumstances or extent (Bhaskar, 2011). This paradigm accepts that different realities interact with each other in deeper relationships than only cause-effect.

Furthermore, these sets of beliefs and features, namely paradigms, derive methodological views. Methodological views are ways to know how and when specific methods should be used to assess reality (Arbnor and Bjerke, 2009).

The analytical viewpoint aims to explore factive reality. It means that elements and models are invariant and applicable independently of changes in the environment or context. In its essence, likewise mathematical formulations, there is no further explanation other than the definitive result itself (Arbnor and Bjerke, 2009). In the case of the Theory of Planned Behaviour, Ajzen (1991) argues that intention and behaviour should be assessed in relation to the specific object and context and any change may compromise the result. Also, he explains that there is space for further investigation, especially in the improvement of the expectancy-value model to achieve global

measurement scale. Therefore, an analytical view approach seems inappropriate and would limit the discussion of findings and its comparison with previous studies.

A second view, namely Actor Viewpoint, sees reality as a social construct in which the matter consists of interactions of the individuals` experiences and the collective experience of individuals. It means that reality is in constant change and ambiguity is desired. In opposition to the two other views in which there is a search for definitions, the actor view is concerned about researchers` denotations of observed situations (Arbnor and Bjerke, 2009). Hence, this view does not fit into the project aim as any attempt to modelling and measuring intention behaviour factors would contradict the uniqueness that each observation and making-sense process on this view would promote.

In the systems view models, a key characteristic is the continuous interaction among different systems, and studying a particular component necessitates contextualization (Arbnor and Bjerke, 2009). This perspective asserts that comprehending a single system, made of various components, requires examining it within its specific environment. However, it is acknowledged that although structural relationships are employed to elucidate behaviour, the perfect prediction of a system remains elusive. Furthermore, within this view, individual elements alone hardly fully explain a phenomenon. Rather, their collective interaction as a cohesive system is essential for understanding. An intriguing aspect of the systems view lies in its adaptability, as systems persistently interact with both their internal and external environments, fostering ongoing development (Arbnor and Bjerke, 2009).

That said, his project embraces the critical realism paradigm, which acknowledges that reality is observable but contingent upon context and subject to interpretation. From a methodological viewpoint, the study is conducted with the assumption that various systems interact to generate a phenomenon influenced by diverse factors and contexts.

Additionally, it posits that a diverse set of mechanisms may be employed to partially explain the phenomena, and the models used are inclusive rather than closed.

2.3 Research Approach

The project adopts an abductive approach that builds upon existing studies and theories, while also adapting to the specific context and integrating aspects from diverse research sources into the framework modelling. This method is reasonably coherent for the development of the present project, considering the abundance of studies within the field that possess defined theoretical frameworks, although exhibiting variations in their application and, notably, in their outcomes, as underscored in the literature review and problem formulation sections.

Dubois and Gadde (2002) explain an abductive process, named Systemic Combining, where the empirical world, theoretical framework, and case analysis evolve simultaneously. They argue that although case studies are hardly useful in generalisation, they are insightful, and continuously combining them with existent theoretical frameworks, empirical findings, and theory is particularly beneficial to the development of existing and new theories. In fact, researchers may start with theoretical knowledge or assumptions pre-defined as in the deductive approach, but as the abduction process is initiated a perception of missing connections between theory and observations may emerge (Gyöngyi and Spens, 2005).

The following chapter intends to develop the literature review and research method.

2.4 Literature Review Methods

The primary purpose of conducting a literature review is to identify the existing body of work and research related to a particular topic. However, literature reviews have a much deeper meaning than a summary. According to Richter (2017), literature reviews are arguments for choices and decisions taken during and for research development.

The first step is the selection and definition of the topic. It may arise from personal interests or even from situational concerns. Although it seems of lesser relevance, this stage has huge consequences on the development of the project because it dictates the project's scope.

Furthermore, in the Problem Formulation chapter, a two-step investigation was conducted with the purpose of evaluating the most pertinent areas for prospective research within the realm of Impact Investing.

First, an unstructured search on the Google Scholar database was made to locate Literature Reviews around Impact Investing and correlated topics between 2018 and 2023. It resulted in six reviews being three systematic reviews and three bibliometric reviews. The papers played a crucial role in delineating areas for potential future research and highlighting trends in investigation. Consequently, the Investor Behavior domain was chosen as the focus area for the development of this project.

Second, an integrative literature review was conducted in the Scopus database focusing on the selected area of study. Indeed, this type of literature review presents a structured process and it helps to create research questions (Richter, 2017). The Scopus database was selected for its extensive collections and comprehensive coverage of various themes as argued by Chalissery et al. (2023).

Lastly, on section 3. Literature Review delineated the context and provided an unstructured Narrative Literature Review referring to the topic of Impact Investing,

establishing the grounds for the research. In the classification of literature reviews, the Narrative Literature Review is categorised as the most basic type and it can be perceived as a snapshot, providing a broad comprehension of a topic to establish a general understanding (Toronto and Remington, 2020).

2.5 Research Method

The project is an experimental quantitative research carried out through online surveys with 278 Brazilian investors during June of 2023. A frequent discussion that occurs in quantitative studies assessing investor behaviour is the validity of hypothetical cases and reported behaviour, thus the need to study real cases (Gutshe and Ziegler, 2019; Apostolakis et al., 2018; Bauer et al. 2021; Brunen and Lauchbach, 2022).

Nevertheless, the resource constraints imposed on a student limit the ability to thoroughly assess data or establish collaborative partnerships with enterprises that could jointly work on sensitive data. Furthermore, the time constraints inherent in the master's thesis pose challenges in effectively validating intentions with actual behaviour. Still, an initial validation of the conceptual framework through an experimental study prior to effectively pursuing resource intensive research, such as in collaborative partnerships, is reasonably coherent.

Hence, the project concentrates efforts on the construction and testing of the theoretical framework and factors influencing Brazilian investors` investment intention toward Impact Investing, setting the grounds for future research. In the absence of a real case, a survey is developed to assess how non-financial factors influence Brazilian individuals` intention towards impact investing. The survey was conducted with ordinary Brazilian individuals with minimum investment experience.

The following section will dig deeper into the survey development.

2.6 Survey Construction

According to Ajzen (1991) intentions and perceptions of control must be appraised in the same context and are valid in that specific context with no additional event while conducting the test, that may change the outcome. In addition, he explains that beliefs used in the construct should be validated previously to the survey with qualitative interviews and literature support.

As a result, a distinct survey model was formulated to align with the project's objectives and the contextual nuances of the respondents. Additionally, the survey was conducted using an online questionnaire implemented on the Google Form platform. It is crucial to emphasise that the original questionnaire was composed in English, and the version provided to respondents has been translated into Portuguese, posing a challenge in maintaining the intended meaning of the questions. However, it should be noted that I, as the researcher, am a native Portuguese speaker, which helps mitigate potential translation challenges.

Prior to delving into the specifics of questionnaire development, it is imperative to provide an elucidation of the technique employed for data collection. Ajzen (1991) postulates two alternatives in methodology for accessing the beliefs and constructions. There is no evidence showing if unipolar (e.g. 0 to 1) or bipolar scale (e.g. -3 to 3) should be prioritised. Still, he points out that the 7-point Linkert’s grade scale is the most used by researchers when applying the planned behaviour theoretical framework. Consequently, the survey was constructed by assessing each factor from 1 to 7.

Subsequently, the case scenario is presented to measure the dependent variable, "intention," along with the questions formulated for each of the constructs within the project's theoretical framework. As previously mentioned, these questions were developed drawing from existing research findings and validated methodologies utilised

in prior studies. Adopting similar methods aims to establish a more robust parallel as well as minimise methodological noise.

Gusarova et al. (2020) and Siqueira Barroso & Araujo (2022) underscore the constrained availability of impact investments in Brazil and other developing nations, alongside a scarcity of qualified professionals in this domain. Bearing that in mind, there is a concern that respondents may possess limited or no understanding of the concept of impact investing. To ensure the generation of responses that effectively measure intentions towards impact investments, participants were provided with a succinct introduction to Impact Investing. Subsequently, respondents were able to answer the questions with a minimal level of prior information.

Following the presentation of the scenario, interviewees were requested to provide their responses to a predefined set of questions, graded on a scale ranging from 1 to 7. These questions aimed to elicit insights into intention and non-financial factors. The initial construct assessed was Intention, serving as the cornerstone of the project, as it is the dependent variable of the model to be examined.

According to Ajzen (2002) the items selected to build the construct should be highly interrelated to present consistency. Ajzen et al. (1985) presented four questions to elicit the behaviour intention that can be found, even adapted, in numerous studies such as Lam and Hsu (2004), Sivaramakrishman et al. (2017); Yee et al. (2022), Qi and Ploeger (2019). Furthermore, the items as a general practice measures not only the willingness but also the willingness attached to how the opportunity is presented. For instance, Yee et al. (2022, pg. 1027) assessed the intention through statements such as *"I would invest in Renewable Energy whenever I am given the opportunity"* and "*I will make an effort to invest in renewable energy in the near future*". Hence, the following questions (Table 3) were developed and adapted based on the mentioned studies.

Construct	Items	How do you evaluate the following statements	Source
Behaviour Intention	INT1	I intend to invest in Impact Investment funds.	Sivaramakrishman et al. (2017)
	INT2	I want to invest in Impact Investment funds	Yee et al. (2022); Sivaramakrishnan et al. (2017)
	INT3	I would invest in impact investments whenever I am given the opportunity.	Yee et al. (2022); Sivaramakrishnan et al. (2017)
	INT4	I will search impact investment funds to invest.	Yee et al. (2022)

Table 3. Intention construct questions. Table by author.

In addition, Attitude Towards the Behaviour was the explanatory construct in the theoretical model. This dimension assesses the individual's mental reasoning of an individual's positive or negative perception regarding a behaviour (Daiyabu et al., 2002; Ajzen, 1991). Several studies pointed out that attitude is a powerful predictor of investment intention (Dayabu et. al., 2002; Dayaratne and Wijethunga, 2015; Kavitha, 2015; Muhammad, 2016).

When assessing the investor`s attitudes toward sustainable investments Gamel et al. (2017), Reyhanloo (2018), and Rathee and Aggarwal (2022) developed questionnaires examining not only their attitude towards the underlying topics, respectively Renewable Energy, Land Degradation, and Impact Investing, but also the financial outcome expected. Therefore, the questions (Table 4) developed in these studies were adapted to the project`s scenario as follows:

Construct	Items	How do you evaluate the following statements	Source
Attitude Towards the Behaviour	ATB1	I think Impact Investing is a promising solution to solve global social and environmental challenges.	Rathee and Aggarwal et al. (2022); Reyhanloo et al. (2018)
	ATB2	I think investments should take into consideration the social and environmental damage they cause.	Gamel et al. (2017)
	ATB3	I think investments should promote social and environmental solutions.	Gamel et al. (2017)
	ATB4	I am convinced that impact investments promote solutions to social and environmental challenges in an effective way	Reyhanloo et al. (2018)
	ATB5	I think impact investments yield high financial returns.	Rathee and Aggarwal et al. (2022); Reyhanloo et al. (2018)

Table 4. Attitude construct questions. Table by author.

In the Theory of Planned Behaviour, Ajzen (1991) postulates that the individual perceived pressure from society towards a specific action influences the individual's behaviour intention and actual behaviour. Notably, Yee et al. (2022), Rathee and Aggarwal (2022), and Reyhanloo et al. (2018) assessed Subjective Norms employing similar questions. All these studies distinguished between family and related people in which the opinion is valued when assessing the respondent's normative beliefs.

Nonetheless, Ariely et al., (2009) found out that people are more inclined to behave prosocially if it is visible to others. As a result, the concept of social signalling was

incorporated into the subjective norm construct for this study. The following question and subsequent statements were adapted from Yee et al. (2022), Rathee and Aggarwal (2022), and Reyhanloo et al. (2018). Additionally, the items SN2 and SN4 were developed based on the findings of Ariely et al. (2009) to assess the individual perception of approval or disapproval of family and close relationship circles with the likelihood of their awareness regarding the hypothesised investment.

Construct	**Items**	**How do you evaluate the following statements?**	**Sources**
Subjective Norms (SN)	SN1	My family members expect me to invest in impact investing	Yee et al. (2022); Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)
	SN2	My family members would be aware of my investment decision.	Ariely et al. (2009)
	SN3	People with whom I closely relate expect me to invest in impact investing	Yee et al. (2022); Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)
	SN4	People with whom I closely relate would be aware of my investment decision.	Ariely et al. (2009)
	SN5	There is a strong need to do something for the society and the environment, which is one of the reasons I should do impact investing	Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)

Table 5. Social Norms construct questions. Table by author.

Perceived Behavioural Control is the third construct in the Theory of Planned Behaviour (TPB) and is the one that directly influences both behaviour intention and actual behaviour. This construct refers to an individual's perceived capacity and self-belief in performing a particular behaviour. Ultimately, a person is more likely to engage in one

behaviour if they believe that they have the capacity to execute the action and perceived control of the outcomes (Ajzen, 1991).

In addition, Yee et al. (2022) and Rathee and Aggarwal (2022) argue that Perceived Behavioural Control is often assumed to be influenced by factors such as knowledge, resources and obstacles. They also point out that individuals exhibiting a high Perceived Behavioural Control tend to display an increased confidence and greater willingness to invest in Renewable Energy.

Thus, the questionnaire developed by Yee et al. (2022) to access Perceived Behavioural Control toward Renewable energy was employed in this study. This selection was made due to the questionnaire's coverage of the elements mentioned in the previous paragraph (Yee et al., pg. 1027). Still, certain modifications were made to tailor the questions to align with the topic of Impact Investing. The details of this construct are presented in the following table:

Construct	**Items**	**How do you evaluate the following statements?**	**Source**
Perceived Behavioural Control (PBC)	PBC1	I feel confident about being able to engage in impact investments.	Yee et al. (2022)
	PBC2	I am able to overcome the obstacles or problems which could prevent me from engaging in impact investments.	Yee et al. (2022)
	PBC3	Engaging in impact investments is within my own control.	Yee et al. (2022)
	PBC4	Engaging in impact investments is easy.	Yee et al. (2022)
	PBC5	I think I have sufficient knowledge which enables me to engage in impact investments	Yee et al. (2022)

Table 6. Perceived Behavioural Control construct questions. Table by author.

Moreover, in the context of this project, the incorporation of a Social Preference Construct into the conventional model of the Theory of Planned Behavior was undertaken as a potential predictor of intention. This addition was based on the research findings of Bauer et al. (2021) and Riedl and Smeets (2017).

In fact, Bauer et al. (2021, pg. 3997) citing Falk. et al. (2016) provide a simple way to elicit the social preference of investors by asking *" How willing are you to give to good causes without expecting anything in return?"*. The question was adapted to the survey by adding the word "money" to enhance the clarity of the idea of expenditure. Consequently, the following question and parameters were formulated:

Construct	**Item**	**Question**	**Source**
Social Preference	SP1	How willing are you to give money to good causes without expecting anything in return?	Bauer et al. (2021); Falck et al., (2016)

Table 7. Social Preference construct questions. Table by author.

Finally, risk propensity and aversion affect the investment decisions towards sustainable investments. For instance, Gamel et al. (2017) findings suggest a limited positive correlation to investments in Renewable Energy while Apostolakis et al. (2018) points to a negative relationship between risk and sustainable investments. Other studies suggest the opposite by finding a positive correlation of social and sustainable investments to higher risk tolerance (Riedl and Smeets, 2017) or no significant relationship (Yee et al., 2022). Hence, the Gamel et al. (2017) and Yee et al. (2022) construct questionnaire model was adopted in this study to elicit risk aversion and further investigation.

Construct	**Items**	**How do you evaluate the following statements?**	**Source**
Risk Aversion	RA1	The risk of losing money on the financial market causes mental stress.	Gamel et al. (2017); Yee et al. (2022)
	RA2	Stability of my investments is more important to me than the chance of a quick profit	Gamel et al. (2017); Yee et al. (2022)
	RA3	Continuity of my investments is more important to me than the chance of a quick profit	Gamel et al. (2017); Yee et al. (2022)
	RA4	Even small financial losses make me nervous.	Gamel et al. (2017); Yee et al. (2022)
	RA5	I am reluctant to take risks regarding financial matters	Gamel et al. (2017); Yee et al. (2022)

Table 8. Risk Aversion construct questions. Table by author.

Lastly, socio-demographic data on age, academic degree, professional financial experience and income is requested from the respondents in order to delineate the sample's profile characteristics. Here, the intention is to identify and select an appropriate sample of surveys and through critical descriptive analysis discover potential biases and/ or findings correlated to specific extracts of the survey's population.

2.7 Data Collection and Sampling

The project relies on quantitative data obtained through online surveys administered via the Google Forms platform. The precise size of the investor population in Brazil remains undetermined; nevertheless the Brazilian Association of Financial and Capital Market Entities (ANBIMA, 2023) estimates that 36% of the population - approximately 60 million people - invest in some kind of financial product. Within this group, only 4% of the population invests in funds, and merely 1% engages in stock market investments, representing approximately 7 million people.

Given the nature of this academic and non-funded project, there are limitations in terms of resources (time and capital) to pursue an optimal sampling strategy. Consequently, non-probability sampling methods are employed. The primary drawback of this approach lies in the lack of control over the sample, rendering the results unsuitable for generalisation to the broader population (Casteel and Bridier, 2021). In other words, the data is only applicable to the research sample and may encompass various biases, potentially leading to sub or over-representation of certain populations. Nevertheless, basic filters are implemented in the survey to ensure that all participants are Brazilian citizens over 18 years of age (eligible to invest) and have made at least one investment in their lifetime.

Furthermore, three subtypes of non-probability sampling were used. Firstly, Convenience Sampling consists of selecting participants based on their relatively easy access by the researcher. Although data collected through this method possibly do not represent the population, it is arguable that to a limited extent data from convenience sampling may be generalised for extracts of the population as usually they share socio-

demographic characteristics (Casteel and Bridier, 2021). In this project, the researcher's personal network consisting of family members, friends, workplace colleagues, and social media connections was approached to respond to the survey.

Secondly, the Snowball sampling method was applied to gather data. It consists of participants that were referred by survey respondents who identified potential respondents whose characteristics match the research's target. The incorporation of this method proportionates on one hand the achievement of a larger number of respondents and hidden populations. However, on the other hand, the ratio of respondents in this method is usually low and the results, as in other non-probability sampling, should not be applied to the broader population (Casteel and Bridier, 2021).

Lastly, individuals may voluntarily choose to participate in the survey upon becoming aware of the research through any means. A relevant issue with this method is the self-selection bias which can potentially compromise the answer reliability (Casteel and Bridier, 2021). Still, the efficacy of this method in touting participants is limited and it is expected that the filters of age and minimal investment experience limit the participation of non-compliant individuals.

2.8 Reliability and Validity

This chapter intends to present the methods used to test the project's Reliability and Validity. The first is concerned with the consistency of the measurement while validity aims to identify to which extent the instruments measure are sound in measuring intention, factors, and constructs (Tavakol & Dennick, 2011). An instrument is only valid if it is reliable but the reliability does not depend on the validity.

2.8.1 Partial Least Square Structural Equation Modelling (PLS-SEM)

The project's tests are conducted using the Partial Least Square Structural Equation Modelling (PLS-SEM) software Smart PLS. Hair et al. (2019)advises researchers to consider the PLS-SEM technique when exploring frameworks with a predictive perspective, models featuring multiple constructs, relatively small sample sizes, and situations where a normal distribution cannot be assured. These aforementioned characteristics are all pertinent to this project. It is important to point out that PLS-SEM is a method that emphasises the prediction of models structured in causal explanations but does not rely on remarkably restrictive assumptions such as in the covariance-based structural equation modelling (CB-SEM).

The following subsections will elaborate on the tests conducted to ensure reliability and validity of the model`s measurement.

2.8.2 Cronbach Alpha and Composite Reliability

According to Tavakol & Dennick (2011), Cronbach Alpha is the most widely used method to test reliability. It is a measure of a construct's internal consistency and varies within a scale between 0 and 1. The objective of deploying a Cronbach Alpha test is to verify to which extent all the items in the test consistently measure the same object. Hence, a higher Cronbach Alpha indicates a lower internal error variance within the test items. Tavakol & Dennick (2011) highlight the need to measure the score each time a test is administered given that its measure reflects the specificities of the sample.

Furthermore, the Cronbach Alpha test is affected by the length of the test. It means that an excessive number of items will increase the index score even when the test is not

homogenous. Bearing this in mind, Tavakol & Dennick (2011) suggests that a score over 0,9 may indicate the possibility of shortening the test. They also explain that a low number of factors in one construct may cause a low index, and consequently underestimation of the index.

In addition, the minimum score acceptable for Cronbach's Alpha is argued to be between 0,7 and 0,95 (Hair et al., 2019; Tavakol & Dennick, 2011; Bernstein, 1994; Altman, 1997; DeVellis, 2003). Hence, a minimum threshold of 0.7 was incorporated aligned with previous studies of Daiyabu et al. (2022), Rathee and Aggarwal (2022), and Gamel et al. (2017).

Yet, Sujati et al. (2020) explain that Cronbach's Alpha should be used when the researcher is certain that the unidimensional principle is fulfilled. In other words, the factors within a construct are equally correlated to the construct. Otherwise, Composite Reliability should be used. Citing Revelle and Zinbarg (2008), they explain that the Composite Reliability test in this circumstance is more accurate and higher than Cronbach's Alpha.

In conclusion, to enhance the credibility of the research, the Composite Reliability test was employed in this project, setting a threshold coefficient of over 0.7, score understood as evidence of test reliability (Sujati et al., 2020; Viladrich et al., 2017).

2.8.3 Construct Validity

To evaluate construct validity two tests are understood as essential, being them Convergent and Divergent Validity. Convergent Validity refers to the idea that different variables are adequately measuring the same construct. Consequently, variables that consistently measure a construct should be highly correlated to the construct (Sujati et al, 2020).

Hair et al. (2019) recommend the use of Average Variance Extracted (AVE) as a convergent validity method. According to them, AVE can describe how the variables interact jointly within the construct. It is claimed that a score over 0.5 can confirm the construct`s convergent validity. This score is achieved by calculating the average of construct`s factor loadings square.

Factor Loadings is a test in which each variable is analysed in regard to its contribution to a factor. In fact, it measures the correlation of the variable with the construct (Sujati et al, 2020). A high correlated variable indicates a more representative item for the construct. Hair et al. (2019) suggests that a variable with a factor loading equal or over 0.5 is significant and therefore, feasible to be considered in the data collection.

Furthermore, Divergent Validity intends to assure that two concepts, or constructs are effectively different. That said, concepts that are meaningfully different should present different measures and limited correlation (Sujati et al., 2020). Hair et al. (2019) suggests the use of heterotrait-monotrait (HTMT) ratio of the correlations. They conclude that constructs with a ratio lower than 0.85 met the divergence criteria.

In accordance with Hair et al. (2019), prior to evaluating the structural model coefficients, it is imperative to conduct an examination for the presence of collinearity issues among the indicators. To assess such concerns, the Variance Inflation Factor (VIF) is a recommended method. A VIF value exceeding 5 indicates the existence of critical issues, necessitating the removal of the respective indicator. Ideally, VIF values should remain below 3 (Hair et al., 2019).

2.9 Analytical Approach and Hypothesis test

Since this project aims to answer the research question "*How do non-financial factors influence Brazilian individual investors' intention to invest in impact investments?"* a conceptual model was developed and seven hypotheses emerged to be tested.

Thus, after validity and reliability tests confirmed the measurement models, the next step is to assess the R^2, also known as coefficient of determination, of the endogenous construct, which is a measure of models`s explanatory power (Hair et. al., 2019). It is a number that varies from 0 to 1 being a higher number significant of higher explanatory power. Hair et. al. (2019) suggests that R^2 can be identified as substantial (> 0.75), moderate (> 0.50), and weak (> 0.25). Still, Becker et al., (2023) suggest that these classifications are open to interpretation depending on the topic.

Hair et al. (2019) also explain that researchers may assess the effect size (f-square) of removing one construct from the model. Although it is intrinsically connected to the path coefficients (β) of each construct, and therefore not strictly necessary, effect size helps to explain the relevance of the construct in the model. In this case, values higher than 0.02, 0.15, and 0.35 are classified as small, medium, and large respectively (Hair et. al., 2019; Cohen, 1988).

Lastly, researchers are advised to assess both the relevance of path coefficients and the significance of all constructs within the model. Path coefficients typically vary from -1 to 1 and indicate the relevance of each construct to the model. A positive score indicates a positive effect, and a negative value a negative effect. Also, one should evaluate the significance of the construct, accepting it when $p < 0.05$ (Becker et al., 2023).

2.10 Research limitations

Up to this juncture, the Methodology chapter has presented a comprehensive overview of the methodological perspective adopted in this project and the corresponding research approach. Furthermore, it has expounded upon the sampling methodology, questionnaire construction, and the techniques employed for data analysis. In this section, the methodological limitations delineated throughout the present study are explained. By doing so, the project establishes its boundaries acknowledging the extent of the findings and defining avenues for discussion.

Firstly, the project limits its extension to measure factors' influence on intention based on stated choices. Several researchers point out that although hypothetical and experimental studies are insightful, the assessment of actual behaviour is essential (Ajzen, 1991; Bauer et al., 2021; Brunen & Laubach, 2022), which raises concerns regarding a potential overestimation of the responses anchoring the model's constructs. A second point of attention suggests that respondents direct a higher focus on features related to impact investing than they would typically do on other attributes, such as financial factors. (Gutsche and Ziegler, 2019).

Secondly, the sampling methods pose a limitation on the generalisation of results. As mentioned in the sub-section Data Collection and Sampling, a series of non-probability methods were applied to gather data which implies two major concerns. On one hand, the respondents' sample is unequally distributed in comparison to the broader population which makes direct generalisation impractical. For instance, the sample has a higher gross income and academic background than the average of the Brazilian population. On the other hand, the limited power over the selection of respondents may resonate as a non-optimal sample. In other words, the existence of participants that do not

meet the nationality, age, and minimal investment experience criteria is feasible (Casteel and Bridier, 2021).

Thirdly, it is worth noting that the majority of the literature gathered on impact investing pertains to countries other than Brazil and is predominantly developed in English. This aspect bears relevance given that translating validated questionnaires into another language poses a challenge in preserving the intended meaning of each question. Nonetheless, the advantage of having a Portuguese native speaker involved in the questionnaire's development should mitigate potential translation issues.

Finally, it is important to acknowledge that impact investing remains relatively unfamiliar in Brazil, bearing a limited number of investment products and skilled professionals dedicated to this area (Gusarova et al., 2020). Consequently, concepts related to impact investments and their underlying meaning might be unfamiliar even to Portuguese-speaking respondents. Thus, although a succinct explanation of Impact Investing was provided at the beginning of the survey, there is a concern that research participants may respond to the questionnaire without fully grasping the concepts included therein.

3. Literature Review

The chapter Problem Formulation presented areas of investigation through analysis of the most recent literature reviews available. Then, the scope of the project was delineated providing the research question that guides this research.

Hence, this chapter aims to provide a thorough understanding of the Impact Investing concept and market. Subsequently, it delves into a discussion of the pertinent theoretical foundations that support the project's development in order to address the research question.

3.1 Impact Investing

Private investors play a critical role while owning large stakes in companies and providing efficient financing for capital markets. Moreover, it is in the investor's interest that the continuity and stability of the earth should be achieved. The Principles for Responsible Investments, an initiative led by United Nations Environment Programme Finance Initiative and United Nations Global Compact, recognizes that institutional investors should incorporate Environmental, Social, and Governance (ESG) factors into the investment analysis and use of the ownership rights to drive improvements as part of their fiduciary duty and in long-term interests of beneficiaries (UNEP and UNGC, 2006).

Furthermore, Sulivan and Mackenzie (2006) cite Mansley's (2000, pg. 3) definition of Responsible Investments as "*Investment where social, ethical or environmental (SEE) factors are taken into account in the selection, retention, and realisation of investment, and the responsible use of the rights (such as voting rights) that are attached to such investments*". In simple terms, Responsible investments aim for the correct use of the resources by organisations taking into consideration the effects on all stakeholders, and thus, diminishing the damage their operations cause to the environment and people.

In this context, it is imperative to highlight that Impact Investing can be perceived as the most extreme manifestation of sustainable finance (Migliavacca et al., 2022). According to the Global Impact Investing Network (GIIN) definition, impact investments are those "*made with the intention of generating measurable social and environmental positive impact alongside financial returns"* (GIIN, no date). Similarly, Wendt (2022) defines impact investing as "*investing in companies that proactively integrate social or environmental return within a business model and investment strategy, normally using a lock-step approach*".

Although there are no consensus definitions for impact investing, the common features among its denotations are the (1) blended value principle, and (2) the principle of responsible investments (Wendt, 2022; Weber and Felmate, 2016a, 2016b). In other words, impact investors introduce an additional layer to their investment screening process, wherein they evaluate opportunities that not only seek profits but also align with solutions to societal challenges.

To contextualise, the International Finance Corporation (2019) estimated that over EUR 2 trillion were invested in impact investments when aggregating private impact investors and Development Financial Institutions. In addition, Phenix Capital Group Impact Report (2023) has mapped 2,232 impact funds spread across the globe with a total capital commitment of EUR 539 billion with consistent growth of participants through the years. However, it is observed that impact investors are still concentrated in developed markets with Europe summing 47% of the total number of impact funds and 59% of the total capital committed to impact investments (Impact Investor, 2022).

In fact, the emergence and growth of the impact investing and sustainable investments market in Europe can be discerned through various characteristics, including the implementation of new regulations and the increasing awareness among the population regarding the impact of their investment decisions. For instance, the European Commission launched 2018 the Sustainable Financial Disclosures Regulation (SFDR) that aims to combat greenwashing – unsustained claims on sustainability - and increase transparency and comparability between financial products providing a framework for environmental and social risks, and disclosure practices by financial market participants (Eurosif, 2022).

Moreover, research conducted by Bauer et al. (2021) with Dutch pension fund members regarding sustainable responsibility of its investments revealed that two-thirds

are willing to expand engagement with investee companies even if they believe it affects their financial returns. Interestingly, most participants believe a higher focus on sustainability does not harm their financial returns. According to the research, a "*key reason is the strong social preference*s" (Bauer et al, 2021, pg. 4012). They elucidate that institutional investors predominantly overlook the social preferences of their clients. Furthermore, the study's concluding remarks cite Guiso, Sapienza, and Zingales's (2006) exposition, indicating that cultural differences can exert influence over economic decisions. This observation opens up avenues for future research to explore the preferences for sustainable investments among diverse countries and populations (Bauer et al., 2021).

In comparison, Siqueira Barroso & Araujo (2022) analysed official databases and mapped a mere 67 funds with sustainable characteristics in Brazil. Also, Yamahaki et al. (2022) explored the development of green bond markets in Brazil and concluded that structural barriers such as lack of legal protection and lower market rate returns of low carbon intensity products move market participants away. Finally, Gusarova et al. (2020) studied the development of Impact Investing in the BRICS (Brazil, Russia, India, China, and South Africa). The results point out that the main obstacles are the lack of information, insufficient financial intermediaries, low participation of institutional investors in impact investing, poor infrastructure, deficiencies of capital, skilled professionals, low liquidity, weak or low state support, and a limited number of impact investing instruments.

In summary, impact investors are characterised by their dual objective of pursuing financial returns while directing their investments towards opportunities that address global social and environmental challenges. Although impact investing has experienced notable growth, it remains primarily concentrated in developed countries due to the

scarcity of suitable infrastructure, investment offerings, and awareness in developing nations.

3.1.1 Characteristics and frameworks

In the realm of impact investing, the discernment of distinctive features, such as intentionality, additionality, impact measurement and management, goes beyond the conventional financial attributes associated with typical investments. Firstly, a clearly articulated intention to direct investments towards positive impact is essential. Brest & Born (2013) point out that such an explicit intention serves to focus attention on the resultant impact, seamlessly integrating it into the investment process.

Secondly, additionality refers to the capital allocated that enabled the positive impact to take place (Brest & Born, 2013). For instance, Development Finance Institutions are often required to prove that their investments were directed towards providing capital into opportunities that the private sector would not usually pursue (Carter et al., 2018).

Thirdly, impact measurement is a significant feature as it facilitates the comparison and informed decision-making concerning investments, while also serving as means to elucidate investors and prevent impact washing (Lam and Tan, 2021; Lall, 2019). Lastly, it is indispensable to establish an impact management system. Lam and Tan (2021) observed that impact practitioners employ a variety of methodologies and terminologies in their impact assessments.

That said, Jackson (2013) and Wendt (2021) recognize that the impact investing industry already adopted a theory of change in different degrees and variations. A theory of change is a tool that defines a logical sequence of actions and outcomes and allows a

clear framework to achieve the desired impact (Jackson, 2013; Lam and Tan, 2021). Still, market participants lack transparency in this process (Jackson, 2013; Wendt, 2021).

The Impact Management Project (IMP) is "*a forum for building global consensus on how to measure and manage impact*" (GIIN and IRIS, 2019, pg. 3). That said, the IMP has outlined five essential dimensions of impact, specifying the data that should be collected: What, Who, How much, contribution, and risk. These dimensions are designed to elucidate the purpose and significance of the contribution, identify the stakeholders influenced, determine the extent of their needs and experienced outcomes, evaluate the impact return resulting from the investor's efforts, and assess the potential risks associated with discrepancies between expected and actual impacts (GIIN and IRIS, 2019). Further, the impact risk dimension identifies nine components that should be assessed to enhance the probability of a positive outcome being realised (IMP, no date). Indeed, these specific types of risks are not typically evaluated within conventional responsible investments, as they are uniquely designed to target impact goals.

In addition, several other impact frameworks are available publicly and an unidentifiable number of others are developed in-house by firms. The United Nations Sustainable Development Goals itself is a framework that guides impact investments (Lan and Tam, 2021). Also, collaborative organisations play a role in developing a common framework to manage and report impact. For instance, the Operating Principles for Impact Management (OPIM) was launched in 2019 captained by the International Finance Corporation and "*provides a framework to ensure that impact considerations are purposefully integrated throughout the investment life cycle*" (OPIM, no date).

Moreover, the IRIS+ is a framework led by the GIIN and its members for reporting and measuring impact (GIIN, no date). Also, Task Force for Climate-Related Financial Disclosures, Science-Based Targets, and EU Taxonomy are the result of joint efforts to

standardize positive and negative impacts measurement. According to Wendt (2022), the lack of consensus in managing and measuring impact slows the development of the impact investing space.

In the realm of Impact Investing, there are impact funds across all asset classes globally. According to Phenix Capital Group (2023), there were 2232 impact funds mapped, being 48% Private Equity, 23% Real Assets, 13% Private Debt, 8% Public Equity, 4% fund of funds, and 1% hedge funds. However, it is important to highlight that the additionality of each asset class may vary given its own characteristics. For instance, Public Equity funds meet the additionality criteria while actively making use of ownership rights (Gilbert et al., 2021).

Concluding, it is important to bear in mind that impact investments target two objectives: Positive Measurable Impact and Financial Return. By their fiduciary duty while investment managers, institutional investors can not compromise one objective over the other. It is meant to say that the rigour of the financial analysis is a priory the same.

3.1.2 Behaviour Research in Impact Investing and related themes

Throughout chapter 1.1, titled Problem Formulation, an examination revealed that numerous research efforts aimed at comprehending the behaviour of investors who target responsible, sustainable, socially responsible, and impact investments. As mentioned earlier, these designations are employed interchangeably by scholars. Still, the core objective of research in this domain remains focused on understanding the factors influencing intention and behaviour. Thus, the current chapter intends to explore the existing body of research on this subject.

According to Barber et al. (2021) impact investors exhibit a greater willingness to pay, indicating their acceptance of lower returns on investments while displaying a difference in the perceived utility of those returns. In fact, Gutsche & Ziegler (2019) findings suggest that warm-glow feelings and substantial environmental awareness lead to an increased willingness to pay among investors.

As demonstrated by Bauer et al. (2021) Dutch pension participants' strong social preferences are a key factor in their support of pension fund`s responsible activities even when potential financial drawbacks are anticipated. Notably, Dutch pension participants manifest limited interest in seeking compensation for their engagement in socially responsible investments (Rossi et al., 2019). Nonetheless, Paetzold et al., (2022) explain that high-net-worth individuals (HNWI) disclose a greater preference towards Sustainable Development Goals investments when such choices are related to higher returns.

In a similar vein, Riedl and Smeets (2017) found out that investors are willing to forgo financial performance in favour of investing in socially responsible opportunities. Conversely, Ariely et al. (2009) demonstrated that investors display a higher inclination to invest prosocially if such behaviour is observable by others. Additionally, in the private sphere, investors respond favourably to monetary incentives for engaging prosocially.

Interestingly, Gutsche et al. (2023) add another layer to the topic by stating that preferences for sustainable investments are driven by non-pecuniary factors. An appropriate instance, Heeb et al. (2023) points out that sustainable investment preferences are driven by emotions over calculative action.

Regarding priority for fund's specificities, Lagerkvist et al. (2019) draw the conclusion that sustainability attributes of funds held greater significance among private investors participating in the research conducted in Sweden. Inversely, Gutsche et al.

(2021) highlight the reduced relevance of non-financial factors in Japan in comparison to Western countries.

Evidently, observable sustainable consumption behaviour is associated with an increased likelihood of selecting sustainable investment products, whereas self-reported consumption does not exhibit a significant relationship with sustainable investment choices (Brunen & Laubach, 2022). In a separate study, Shanmugan et al. (2022) discovered a connection between subjective knowledge, information behaviour, risk propensity and sustainable investments.

It is important to bear in mind that the decision to opt for sustainable investments remains unaffected by various defaults associated with the status quo bias, such as loss aversion and regret avoidance (Bauer et al., 2021; Samuelson and Zeckhauser, 1988; Kahneman, 1991; Tversky and Kahneman, 1991; Feldman, Miyamoto, and Loftus, 1999; Nicolle et al., 2011). Still, risk preferences are regarded as a powerful explanatory variable of economic decisions (Ding et al., 2010)

Moreover, socioeconomic characteristics are pointed out as influencing factors of behaviour. Among them, several studies present age as a relevant factor towards sustainability preferences. For instance, investors' preference for sustainable activities increases with age in the Netherlands (Delsen & Lehr, 2019). Indeed, age proves to be a relevant factor not only in the Netherlands, but as pointed out by Krupa et al. (2020) in Poland, the Baby Boomer Generation exhibits a higher tendency to express a socially responsible attitude when it comes to investing, compared to younger generations. Further, Apostolakis et al. (2018) analysis revealed that younger participants exhibited greater levels of insecurity and lower confidence regarding the outcome of Socially Responsible Investments (SRI) while a higher income appears negatively related to sustainable choices. Yet, the opposite demonstrates to occur in Spain as Chamorro-Mera

and Palacios-Gonzáles (2019) identified that young savers in the country display a greater propensity to engage with donations-linked products.

To complement this section, several studies building on the Theory of Planned Behaviour identified a significant impact of attitudes, subjective norms, and perceived behaviour on the investors' intention towards a set of responsibly related investments (Rathee & Aggarwal, 2022; Raut et al., 2021; Yee et al., Daiyabu et al., 2022; Reyhanloo et al., 2018; Gamel et al., 2018).

In conclusion, the research exploring the factors that influence investment behaviour towards impact investing and related topics reveals distinct sub-areas, encompassing beliefs, social preferences, as well as sociodemographic and financial factors. The subsequent chapters will delve further into three topics that serve as cornerstones in the development of the Conceptual Framework for this project: the Theory of Planned Behavior, Social Preferences, and Risk Aversion.

3.2 Theory of Planned Behaviour (TPB)

Several attempts to explain the mechanism behind human behaviour have been performed by scholars leading to different theoretical frameworks. General attitudes, personality traits, and locus of control attempts to infer or predict behaviour proved unsuccessful, leading scholars to abandon these concepts (Ajzen, 1991; Wicker, 1969; Mischel, 1968).

Ajzen (1991) directed his efforts towards cognitive self-regulation as a means of predicting behaviour, culminating in the formulation of the Theory of Planned Behavior (TPB). Subsequently, this theoretical framework has been employed in numerous studies investigating investors' investment decisions (Rathee and Aggarwal, 2022; Gamel et al., 2017; Brunen and Laubach, 2022; Yee et al., 2022; Warsame & Ireri, 2016; Stopczynski & Ziemba, 2022; Daiyabu et al., 2022;).

Ajzen (1991) developed the Theory of Planned Behaviour as an extension of the Reasoned Action Theory given its limitation in predicting behaviour in which the individual has deficient deliberate control. Thus, the TPB contributes to the original model by adding the Perceived Behavioural Control construct along with Attitudes and Subjective Norms. Figure 2 shows the diagram used by Ajzen (1991) to illustrate the Theory.

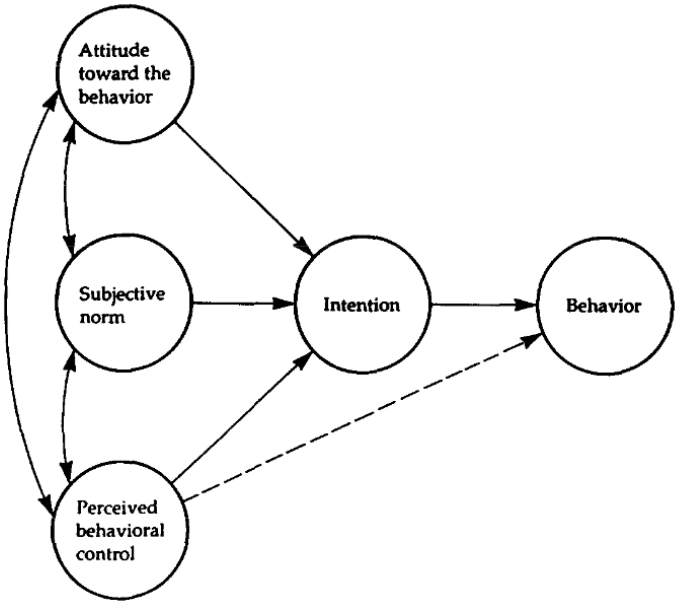

Fig. 2. Theory of Planned Behaviour. Ajzen, 1991, pg. 182.

In the Theory of Planned Behaviour, a central element is the intention of performing a specific behaviour. Akhtar & Das (2019) explain behavioural intention as an immediate antecedent of behaviour and an indication of willingness to perform a specific behaviour. In other words, a higher intention of performing a behaviour should increase the odds of the behaviour happening (Ajzen, 1991). Moreover, the intention is described as a result of the interaction of motivational factors (Independent Determinants), namely, Attitudes, Subjective Norms and Perceived Behavioural Control (Ajzen, 1991; Akhtar & Das, 2019).

Attitude Towards the Behaviour can be explained as the individual`s response magnitude given one behaviour. It may be explained as the favourable or unfavourable perceptions around performing a behaviour (Ajzen, 1991). Attitudes are formulated through the aggregation of various beliefs concerning a particular topic. Hence, by balancing the outcomes of beliefs, individuals automatically create an attitude towards a specific behaviour (Ajzen, 1991). Accordingly, "*given beliefs about consequences and sentiments about those outcomes it is almost tautological to postulate that players choose the most favourable course of action given their beliefs"* (K. Levine, 2012, pg. 6).

Subjective Norms refer to the individuals' perceived pressure from society in relation to the performance of one specific behaviour. It is important to highlight that as Attitudes, Subjective Norms are formed by underlying Normative Beliefs. According to Ajzen (1991, pg. 195), normative beliefs are the individual perception of the "*likelihood that important referent individuals or groups approve or disapprove a given behaviour"*. In this context, it is vital to emphasise that individuals may hold multiple beliefs regarding a specific topic. Nonetheless, among these beliefs, there is a particular subset of beliefs, namely salient beliefs, that are understood as essential in forming the determinants (Ajzen, 1991).

Finally, the Perceived Behavioural Control alludes to the individual understanding of his own ability to perform a behaviour (Ajzen, 1991). In other words, one's capability perception of successfully accomplishing a specific behaviour increases the likelihood of one performing the behaviour. It is constructed from a set of control beliefs related to the evaluation of skills, confidence and ability to conduct the behaviour. Here, it is important to emphasise that in the TPB, Perceived Behavioural Control does not only affect the behavioural intention but directly influences the behaviour itself. Hence, as strong as

one's intention might be, the likelihood of the behaviour being concretized depends on the individual perception of the ability to successfully complete the behaviour.

Finally, Ajzen (1991) explains that each of the determinants may appear as significant or insignificant, strong or weak in their influence towards behaviour intention, depending on the specific context. Importantly, while the theory of planned behaviour presents a framework that can be applied to different studies, it is not meant to say that they are the unique factors explaining a behaviour. Indeed, personality traits and actual control as well as broader attitudes may have an influence on specific behaviours (Ajzen, 1991).

3.3 Social Preferences

Economists capture decisions as a function of utility maximisation (Becker et al., 2012). It means the decisions are taken according to the additional value or benefit that the individual or group receives for an act (Cartwright, 2014). According to Becker et. al. (2012), the individuals' utility is shaped by preferences such as time, social preferences, and risk that alongside beliefs, strategic consideration, perceptions, prices and constraints shape a behaviour.

Social preferences refer to the premise that individuals' choice is not exclusively dependent on their own material payoffs, but also in relation to others' behaviour and payoffs including altruism and reciprocity (negative or positive) (Becker, et. al., 2012; Eckel and Grossmann, 1996).

Charness and Rabin (2002) explain that often participants in events sacrifice their own payoff to punish or reward other participants depending on their posture. Further, economists developed different models of social preferences aiming to capture insights that could help to develop economic studies.

First, difference-aversion models assume that individuals are motivated to reduce differences in their own and other payoffs. Second, reciprocity models are based on the idea that people respond by increasing or reducing their own payoff in favour or against others according to other individuals' behaviour. Lastly, social-welfare models assume that people aim to increase social surplus and therefore, are willing to reduce their surplus (Charness and Rabin, 2002). In fact, Charness and Rabin (2002) demonstrate that social welfare models are the most suitable to explain behaviour when reciprocity is not an issue.

Furthermore, social preference findings can not be generalised for all populations. Falk et. al, (2015, pg. 1) suggests that preferences are significantly associated with regional variables such as income, democracy, inequality, redistributive policies, religion, and geographic and climatic variables. Indeed, the variations occur not solely among countries but within them.

In addition, the sociodemographic conditions of individuals are highly correlated to their preferences. For instance, patience increases with age while risk propensity reduces. Also, Falk et. al (2015) study elucidates that the environment in which a person is inserted affects their preferences. In this case, the individual's affiliation to certain entities or institutions such as a temple or religion might shape their preferences.

Finally, social preferences emerge as a powerful predictor of behaviour in several spheres. Falk et. al. (2015) exemplify occasions of prosocial behaviour as donations, volunteering time, assisting strangers, and others. Notably, Falck. et. al. (2016) recognized that social preference studies lacked a method that would enable the comparison of results. They developed a survey module to elicit social preferences from a range of methods and questionnaires used in previous studies to find a validated cost-effective solution. Additionally, they formulated a more streamlined format that can be easily implemented by market participants and professionals with significant results when

compared with the more robust questionnaire. Still, several studies have been using social preferences as a factor to explain investments. For instance, Bauer et al. (2021) relate the Dutch pension members' decisions to their strong social preferences. Besides, Riedl and Smeets (2017) concluded that social preferences explain investments in Social Responsible Investments. The first used the altruist section of Falck et al. (2016) method to elicit social preferences while the second used a two-player game building on the reciprocity concept.

3.4 Risk Aversion

Economists frequently turn to the Expected Utility framework when evaluating choices. Within this framework, the objective is to measure the intrinsic value contributed by an additional measure of return (reward) in relation to an additional measure of risk undertaken. In this sense, "*loss aversion implies that people prefer to avoid losses relative to status quo than they are attracted by gains"*(Rabin, 2000, p. 1288). Then, risk-averse and risk-seeking refer to the curvature of the utility function (Weber et al., 2002, p . 264).

Moreover, Risk Attitude can be understood as *"a person`s standing on the continuum from risk aversion to risk seeking*" (Weber et al., 2002, p. 264). This concept is intrinsically linked to economic decisions and the scholars' aim of comprehending and predicting economic behaviour (Dohmen et. al, 2002). The concept has been used and better illustrated in finance around the theme of risk-return, where there is a trade-off between additional risk assumed and higher return (Weber et al., 2002).

In fact, risk preferences exert significant explanatory influence over numerous economic decisions (Ding et al., 2010). According to Chiappori and Gollier (2006), risk preferences induce a significant effect on insurance purchases, asset allocation, occupational choice, and investments in education.

Still, risk preferences' effect on economic decisions varies according to the dimension of the stakes in risk (Rabin, 2000). This implies that risk preferences assume a more prominent role in the decision-making process when the negative effect is larger in their situation or when the stakes are neutral for non-significant amounts. For instance, Rabin's (2000) research shows a much larger effect of risk preference when payoffs are scaled up.

Furthermore, Einav et. al. (2010, pg. 1) explain that context is "*king*" and the individual's risk preferences present different features depending on the circumstances. Hence, individuals may be seen as risk-averse in one domain and risk-seeking in another although using the same method to elicit (Weber et. al., 2002). Therefore, the risk preference measurement is attached to the domain in which it is measured and should not be extrapolated across domains.

In addition, person-centred characteristics such as age, gender, parental income, culture and personality jointly influence risk-taking behaviour (Weber et. al., 2002; Ding et. al., 2010). In economic models, cognitive ability emerges as another determinant of decision-making. Notably, Dohmen et al. (2010) show that cognitive ability exerts a substantial, positive, and systematic influence on risk-taking behaviour.

Lastly, methodological procedures to elicit risk-taking behaviour are largely discussed in the literature. The aforementioned variations in domain, sociodemographic, and size point out the need for calibrating models (Ding et. al., 2010). Also, Holt and Laury (2002) findings suggest that people tend to underestimate their risk avoidance in hypothetical scenarios. Yet, self-reported surveys such as self-scaling procedures in questions regarding hypothetical investment choices arise as valid indicators of choices under risk (Ding et. al., 2010).

4. Conceptual Framework

Based on the literature review, a conceptual framework was developed for this project aiming to contribute to the discussion around the influence of non-financial factors on Brazilian individuals' intention to perform impact investments.

The conceptual framework intends to solidify the research question and relevant literature around the theme in a systematic visual way through the delineation of the research paths to reach the results while highlighting the key constructs and their relationship. Developed specifically for this study, the following figure (Fig. 3) outlines the project scope around seven factors: Attitude Towards Behaviour, Subjective Norms, Perceived Behavioural Control, Social Preferences, Risk Aversion, Professional Financial Experience and Sex.

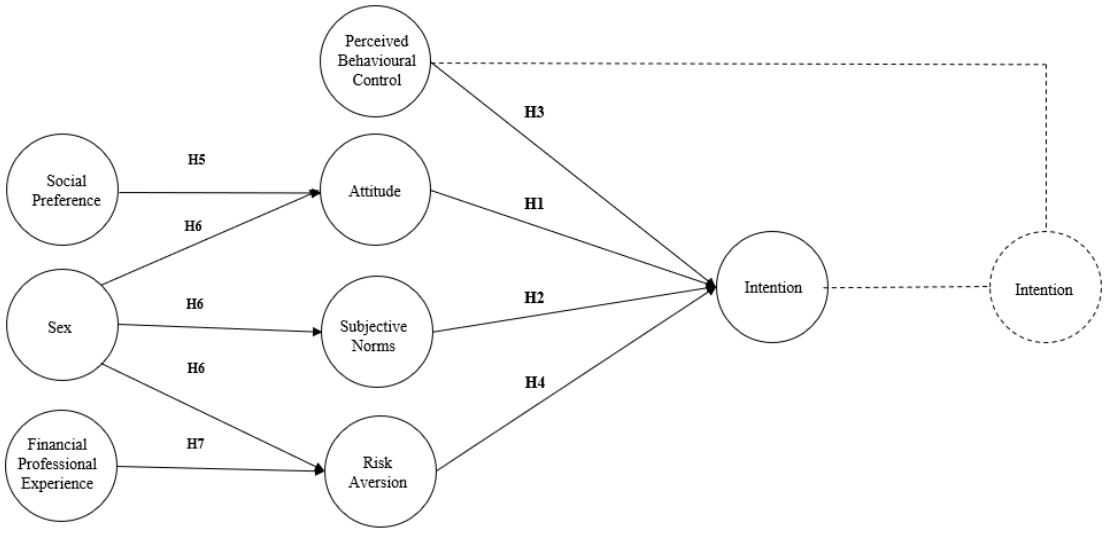

Fig 3: Research model to predict intention based on the Theory of Planned Behaviour (Ajzen, 1991). Figure by author.

The project's conceptual framework above is inspired by the diagram of the Theory of Planned Behaviour (TPB) developed by Ajzen (1991). Nevertheless, the project's formulation differs in some aspects when compared to TPB, including limitations of extent. This will be further explained subsequently.

First, the original conceptual framework has intention as a central element in predicting actual behaviour. It is formatted by the weighted influence that three determinants (Attitude, subjective norms, and perceived behavioural control) exert on intention. Differently, the conceptual framework of this project features seven determinants that influence intention, including Social Preferences, Risk Aversion, Sex, and Financial Professional Experience.

Secondly, Ajzen's (1991) framework measures the actual behaviour (outcome) and the influence that intention and perceived behavioural control jointly employ on it. However, this project, given the limitations already outlined previously (see section 2.10), is unable to capture actual behaviour. As a consequence, the conceptual framework is delimited to assess the impact of the seven determinants on intention by testing the subsequent seven hypotheses.

H1: Attitude towards impact investing positively influences Brazilian investors' intention to invest in impact investments

H2: Subjective Norms positively influence Brazilian investors' intention to invest in impact investments.

H3: Perceived Behavioural Control positively influences Brazilian investors' intention to invest in impact investments

H4 Risk Aversion influences Brazilian investors' intention to invest in impact investments

H5: Social Preference indirectly influences Brazilian investors' intention to invest in impact investments mediated by Attitudes towards impact investing.

H6: Sex indirectly influences Brazilian investors' intention to invest in impact investments.

H7: Financial Literacy indirectly influences Brazilian investors' intention to invest in impact investments.

In fact, the initial three hypotheses are formulated in accordance with the Theory of Planned Behaviour, wherein the three determinants are considered as predictor measures (whether significant or insignificant) of intention in behaviours where individuals possess a certain level of discretion (Ajzen, 1991). Several studies supported the prediction power of these constructs in responsible, social and impact investment intention.

Rathee & Aggarwal (2022) concluded that attitudes positively influence investors' intention towards impact investing in India. Also, Bauer et al. (2021) indicate that a majority of pension scheme members hold a positive attitude towards sustainable investments and have voted in favour of urging pension managers to expand sustainable activities. Yet, the willingness to pay for sustainable investments increases when the awareness around the topic and warm-glow feelings are stronger (Gutsche & Ziegler, 2019). Further, studies show that if investors believe that their investment can have an effect on sustainability, they have a higher probability of investing in sustainable options (Lagerkvist et al., 2021). For these reasons, it is plausible to assume that attitudes positively affect the intention of Brazilians to invest in impact investments (H1).

Several studies have contradicting findings presenting subjective norms as relevant or weakly influencing investors' intentions toward sustainable, social and impact

investments (Rathee & Aggarwal, 2022). Despite the findings regarding social norms vary, it is undeniable that there exists a possibility of these norms influencing investment decisions. Indeed, investors are more likely to invest prosocially if they believe that people will be aware of their choice (Ariely et al., 2009). Accordingly, it is feasible to expect that social norms positively influence the Brazilian's intention towards impact investing (H2).

Perceived behaviour control emerge as a significant predictor of intention in several studies (Rathee & Aggarwal, 2022; Raut et al., 2021; Yee et al., Daiyabu et al., 2022; Reyhanloo et al., 2018; Gamel et al., 2018) and it relates to the individual valuation of skills, confidence, and ability in performing a behaviour (Ajzen, 1991). As a matter of fact, the additional characteristics of sustainability increase the complexity for the ordinary investor to balance potential impact in risk and returns (Delsen and Lehr, 2019). Thus, it is plausible to suppose that one's positive perceived behaviour control influences positively their intention to invest in impact investments (H3).

In addition, risk preferences hold substantial explanatory power over several economic decisions (Ding et al., 2010; Dohmen et. .al., 2002). Risk aversion (H4) plays a critical role in financial decisions and attests to a positive, yet limited correlation to investments in Renewable Energy (Gamel et al., 2017). Riedl and Smeets (2017) find that risk tolerance has a significant positive effect on the choice for Social Responsible Investments. In Japan, economic preferences seem to have a higher influence on investment decisions than in Western countries (Gutsche et al., 2021). Also, Gutsche et al. (2023) find that economic preferences, including risk preferences, are not related to investment in sustainable options. Lastly, Apostolakis et al. (2018) identified different clusters of investors according to their sustainability preferences and captured differences

in their risk tolerance. So, given the mentioned, for this project, the hypothesis that the intention to invest in impact investments is influenced by Risk Aversion was formulated.

Furthermore, Social Preferences are a strong predictor of behaviour in several areas (Falck et. al., 2015). The realm of impact investing is highly aligned with social welfare models conceptualisation where an altruistic attitude of the individual is meant to increase social surplus (Charness and Rabin, 2002). In this respect, Bauer et al. (2021) relate the Dutch pension participant`s willingness to increase activities in responsible investments to their strong social preferences. Hence, in the present project, it was postulated that social preferences exert an effect on attitudes and, consequently, an indirect influence on investors' impact investing intention (H5).

As previously mentioned, multiple studies concluded that socio-demographic and non-pecuniary factors impact individuals' financial decisions. For instance, sex is found as a behaviour determinant in several studies. Gutsche et al. (2023) findings support that gender is directly related to intention and attitude towards sustainable investment behaviour. Also, there is a significant correlation between sex and risk aversion which is expected to play a critical role in investment decisions (Weber et al., 2002; Ding et al., 2010). Finally, the United Nations expose that there is a gender gap and that women encounter diverse social and economic barriers (*Transforming Our World: The 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs*, n.d.). That said, it is conceivable that women and men feel social pressure differently. Consequently, in this research, it is expected that due to the presence of evidence in previous studies demonstrating the influence of sex on three constructs, it would also have an indirect effect on intention (H6).

Lastly, Dohmen et al. (2010) concluded that cognitive ability applies an impact on risk aversion while Gutsche et al. (2023) identify preferences for sustainable

investments being driven by financial literacy. Still, the questionnaire asked about professionals with financial market experience who are assumed to have higher cognitive ability and financial literacy than non-financial professionals. Bearing the assumption in mind, it was postulated that professional financial market experience holds an indirect influence on the individual's intention to invest in impact investments (H7).

5. Analysis

This chapter aims to present the data collected and analysis through the methodological tools and techniques previously elucidated in the Methodology section. Initially, a detailed descriptive analysis of the survey responses is provided to give a clear picture of the respondents and identify possible biases and insights that could emerge (see Appendix 10.3 for complete tables). Second, a series of statistical tests were carried out to attest to the theoretical framework validity and reliability of the questionnaire applied. Lastly, the hypotheses were tested accordingly following the methodological framework.

5.1 Descriptive Analysis of Dataset

The project's survey was conducted employing the Google Forms Tool during the period between 19th June 2023 and 30 June 2023 with the participation of 278 Brazilian individuals. Subsequently, 23 questionnaires were excluded from the analysis as they did not meet the criterion of possessing at least one prior experience with investments. The second selection criterion was a minimum age of 18 years old which under the Brazilian penal code the individual becomes fully responsible for their acts. In addition, to assess the effect of sex added in the theoretical framework, one respondent who declared "the other sext" option was excluded. In fact, there were no respondents under 18 years old

and the final number of respondents was 254 (n). This number is slightly below 270, the suggested ideal number of 10 respondents per factor (taking into consideration a total of 27 factors) according to studies mentioned by Rathee Aggarwal (2022). Nonetheless, the measure model`s analysis proved to be sound (see following chapter 5.2).

The following table illustrates the respondents' samples that are valid. Accordingly, there are 89 (35%) female and 165 (65%) male respondents. Furthermore, most of the respondents claimed to be between 31 and 70 years old.

Demographics	Outcome	N (254)	%
Gender	Female	89	35,0%
	Male	165	65,0%
Age	< 18	0	0,0%
	18 - 30	12	4,7%
	31 - 40	67	26,3%
	41 - 50	45	17,6%
	51 - 60	54	21,2%
	61-70	63	24,7%
	> 70	13	5,1%

Table 9. Valid respondents sample (n = 254, n(f) = 89, n(m) = 165). Table by author.

In addition, the data collected may be a reflection of the Convenience, Snowball and Voluntary sampling methods applied to gather data on this project, as previously mentioned. For instance, I have been working in financial market-related companies for over 8 years and my professional network comprises a relevant portion of financial market professionals. Consequently, 114 (44,9%) of respondents are financial market professionals and 140 (55,1%) are ordinary individual investors. Bearing in mind that Professional financial experience is a factor analysed in the project's model, a decent assessment of the factor is expected given the relatively even distribution.

Demographics	Outcome	Total	%	Female	%	Male	%
Financial market professional	Yes	114	44,9%	39	43,8%	75	45,5%
	No	140	55,1%	50	56,2%	89	53,9%

Table 10. Valid respondents sample by Profession type (n = 254, n (fm) = 144, n (nfm) = 140. Table by author.

A notable aspect of the sample is the participant's general high academic background level. The sample presents 161 (63,4%) respondent post-graduated, 83 (32,7%) holding a bachelor's degree while only 8 (3,1%) participants have completed high school and 2 (0,8%) concluded elementary school. In comparison, the OCDE (2021) estimates that the number of Brazilians who have completed Bachelor's and Master's equivalent degrees are 20% and 1% respectively.

Demographics	Outcome	Total	%	Female	%	Male	%
Academic Background	Elementary school incomplete	0	0,0%	0	0,0%	0	0,0%
	Elementary school complete	2	0,8%	2	2,2%	0	0,0%
	High School complete	8	3,1%	6	6,7%	2	1,2%
	Bachelor complete	83	32,7%	29	32,6%	54	32,7%
	Post graduation complete	161	63,4%	52	58,4%	109	66,1%

Table 11. Valid respondents sample, Academic Background by Sex (n = 254, n (f) = 89, n (m) = 165) Table by author.

Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Academic Background	Elementary school incomplete	0	0,0%	0	0,0%	0	0,0%
	Elementary school complete	2	0,8%	1	0,9%	1	0,7%
	High School complete	8	3,1%	5	4,4%	3	2,1%
	Bachelor complete	83	32,7%	40	35,1%	43	30,7%
	Post graduation complete	161	63,4%	68	59,6%	93	66,4%

Table 12. Valid respondents sample, Academic Background by Profession Type (n = 254, n (fm) = 114, n (nfm) = 140). Table by author.

In addition, the respondents were inquired regarding their current occupation. The sample does not present students and only one person claimed to not be working or studying. Among the participants, 47,2% (49,4% of females and 46,1% of males) total respondents

reported being employed, 34.6% identified as entrepreneurs (24,7% of females and 40% of males), and 17,7% stated occupation as retired (24,7% of females and 13,9% of males).

Demographics	Outcome	Total	%	Female	%	Male	%
Occupation	Not working or studying	1	0,4%	1	1,1%	0	0,0%
	Student	0	0,0%	0	0,0%	0	0,0%
	Employed	120	47,2%	44	49,4%	76	46,1%
	Entrepreneur	88	34,6%	22	24,7%	66	40,0%
	Retired	45	17,7%	22	24,7%	23	13,9%

Table 13. Valid respondents sample, Occupation by Sex (n = 254, n (f) = 89, n (m) = 165). Table by author.

Furthermore, the analysis of occupation by profession type shows that the respondents with Professional Financial experience that claimed to be employed sum 64 (56,1%) in comparison with Non-Financial Market Professional participants that sum 56 (40%). Inversely, financial market professionals that are entrepreneurs sum 32 (28,1%) compared to the other profession type that sums 56 (40%) of entrepreneurs.

Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Occupation	Not working or studying	1	0,4%	0	0,0%	1	0,7%
	Student	0	0,0%	0	0,0%	0	0,0%
	Employed	120	47,2%	64	56,1%	56	40,0%
	Entrepreneur	88	34,6%	32	28,1%	56	40,0%
	Retired	45	17,7%	18	15,8%	27	19,3%

Table 14. Valid respondents sample, Occupation by Profession Type (n = 254, n (fm)= 114, n (nfm) = 140). Table by author.

As mentioned previously, the question “Investing Frequency” was applied to discern the validity of the survey by excluding those who have never invested. The sample distribution of the investing frequency levels ranges from 18,1% for “I have invested a few times” to 29,5% for “ I invest occasionally”. The number of individuals that invest

frequently or are continuously investing are higher among male than females with 58,8% versus 40,5% respectively. Also, Financial Market Professionals arise with a proportionally higher investment frequency summing 67,5% versus 40% in the peer group.

Demographics	Outcome	Total	%	Female	%	Male	%
Investing frequency	I have never invested		0,0%	0	0,0%	0	0,0%
	I have invested a few times	46	18,1%	22	24,7%	24	14,5%
	I invest occasionally	75	29,5%	31	34,8%	44	26,7%
	I invest frequently	67	26,4%	20	22,5%	47	28,5%
	I am continuously investing	66	26,0%	16	18,0%	50	30,3%

Table 15. Valid respondents sample, Investing frequency by Sex (n = 254, n (f) = 89, n = (m) 165). Table by author.

Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Investing frequency	I have never invested		0,0%	0	0,0%	0	0,0%
	I have invested a few times	46	18,1%	9	7,9%	37	26,4%
	I invest occasionally	75	29,5%	28	24,6%	47	33,6%
	I invest frequently	67	26,4%	39	34,2%	28	20,0%
	I am continuously investing	66	26,0%	38	33,3%	28	20,0%

Table 16. Valid respondents sample, investing frequency by Profession Type (n = 254, n (fm) = 114, n (nfm) = 140). Table by author.

Moreover, participants were inquired regarding their financial objectives while investing. The highest values among Brazilian investors in the sample proof to be the concern with retirement (26% of total, 17% among female, and 32% among male) and optimization of savings (39% of total, 38% among female, and 39% among male). In sequence, respondents indicate an interest in saving capital for emergencies or protection against inflation.

In this context, it is important to highlight that the sample holds an income profile that does not reflect the reality of the Brazilian population, and therefore, these financial objectives may be also influenced by their financial position and should not be generalised

to the entire population in Brazil. By way of illustration, according to Instituto Brasileiro de Geografia e Estatística - IBGE (2022) the Brazilian population's mean monthly income is R$2.533,00 and 90% of the population earn less than R$3.500,00 monthly (IBGE, 2019).

Still, there are divergences in the distribution of investment goals and income between male and female in the sample. Although the IBGE (2021) evidences a huge gender pay gap with women earning 77,7% of men in Brazil, the data provided in this project is an extract of the researcher's network, and one should not intake any conclusion from the differences delineated.

Financial Objectives	Total	%	Female	%	Male	%
I do not invest	1	0%	1	1%	0	0%
I want to save money for emergencies	29	11%	15	17%	14	8%
I want to save money to travel and buy goods	15	6%	8	9%	7	4%
I want to buy a house	8	3%	4	4%	4	2%
I want to save for my retirement	67	26%	15	17%	52	32%
I want to optmize my savings	99	39%	34	38%	65	39%
Protect my resources from inflation	24	9%	9	10%	15	9%
Other	11	4%	3	3%	8	5%

Table 17. Valid respondents sample, Financial Objectives by Sex (n = 254, n (f) = 89, n (m) = 165). Table by author.

Income	Total	%	Female	%	Male	%
No income	1	0%	1	1%	0	0%
up to R$2.499,00	6	2%	5	6%	1	1%
From R$2.500,00 to R$4.999,00	25	10%	14	16%	11	7%
From R$5.000,00 to R$7,499,00	35	14%	20	22%	15	9%
From R$ 7.500,00 to R$ 9.999,00	30	12%	8	9%	22	13%
From R$10.000,00 to R$12.499,00	29	11%	12	13%	17	10%
R$ 12.500,00 or more	109	43%	20	22%	89	54%
I prefer to not say	20	8%	9	10%	11	7%

Table 18. Valid respondents sample, Monthly Income by Sex (n = 254, n (f) = 89, n (m) = 165). Table by author.

The following tables assess the distribution of financial objectives and income per profession type (Financial Market or Non-Financial Market Professional). In fact, this classification does not show relevant differences and looks fairly similar for the different types of professions within the sample.

Financial Objectives	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
I do not invest	1	0%	0	0%	1	1%
I want to save money for emergencies	29	11%	11	10%	18	13%
I want to save money to travel and buy goods	15	6%	6	5%	9	6%
I want to buy a house	8	3%	4	4%	4	3%
I want to save for my retirement	68	27%	29	25%	38	27%
I want to optmize my savings	98	39%	48	42%	51	36%
Protect my resources from inflation	24	9%	11	10%	13	9%
Other	11	4%	5	4%	6	4%

Table 19. Valid respondents sample, Monthly Income by Profession (n = 254, n (fm) = 114, n (nfm)= 140). Table by author.

Income	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
No income	1	0%	0	0%	1	1%
up to R$2.499,00	6	2%	1	1%	5	4%
From R$2.500,00 to R$4.999,00	24	9%	12	11%	12	9%
From R$5.000,00 to R$7,499,00	35	14%	9	8%	26	19%
From R$ 7.500,00 to R$ 9.999,00	30	12%	19	17%	11	8%
From R$10.000,00 to R$12.499,00	29	11%	16	14%	13	9%
R$ 12.500,00 or more	109	43%	49	43%	60	43%
I prefer to not say	20	8%	8	7%	12	9%

Table 20. Valid respondents sample, Monthly Income by Profession (n = 254, n (fm) = 114, n (nfm) = 140). Table by author.

This chapter offered a comprehensive overview of the gathered data and sample, and potential biases inherent to the data collection methods were identified. Particularly, the sample is characterised by a remarkable academic background and higher gross income than the broader Brazilian population. A complete profile of the respondents is available in the appendix section.

5.2 Measurement Models Analysis

According to Hair et al. (2019), the initial step in evaluating the outcomes of Partial Least Squares Structural Equation Modelling (PLS-SEM) involves an assessment of the measurement models. Only upon verifying the reliability and validity of the measures and constructs, one may proceed to evaluate the structural model.

As indicated in Chapter 2.8, the analysis of the data in the present project was conducted through the statistical software SmartPLS 4. The following diagram (Fig. 4) provides a concise representation of the initial model developed through the synthesis of the literature review and conceptual framework, as discussed in Chapter 4.

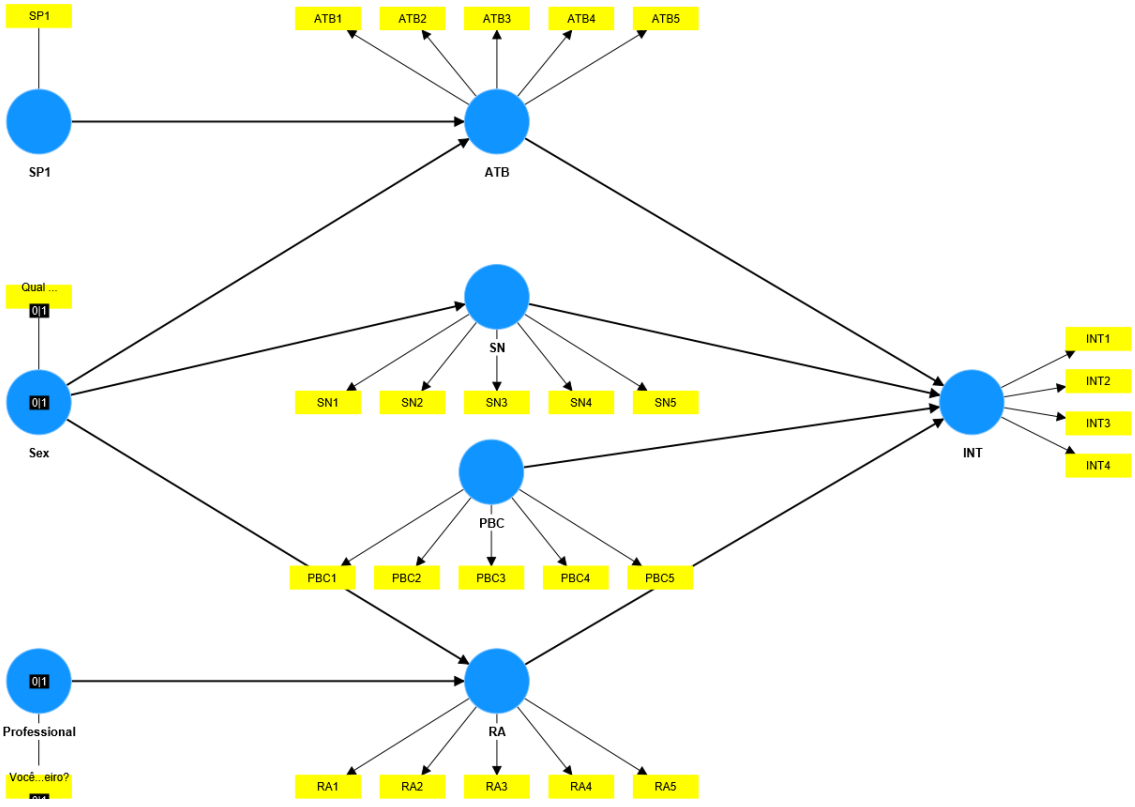

Fig. 4. Initial Theoretical Framework Model. Constructed on SmartPLS 4. Figure by author.

In order to test the reliability of the study's model, this project analyses four factors: Loadings, Cronbach's Alpha, Composite Reliability and Average Mean Extracted.

The initial phase was assessing the reliability of the measurement model consisting of assessing the factor loadings of the constructs. The factor loading score enables the assessment of the contribution of a factor to the construct to which it is attached. According to Hair et al. (2019), an indicator with a factor loading under 0,5 should be considered to be deleted. In fact, variables with a low score are less representative to the construct and may be carefully analysed in relation to its exclusion (Sujati et al., 2020).

The second step consisted in analysing the internal consistency of the measurement models with the aim of testing how the factors collectively measure the same object. In other words, highly correlated factors within a construct result in higher internal consistency. The Crobach's Alpha for each construct was measured with a threshold of 0,7 and a maximum of 0,95 followed by the Composity Reliability with a threshold of 0,7 with a maximum of 0,95. Hair et al. (2019) suggest that Cronbach's Alpha is overly conservative while the Composity Reliability is seem more lenient. Then, the use of both measures aims to guarantee the internal consistency of the constructs.

The third step included analysing the convergent validity of the constructs (Hair et. al., 2019). It intends to check if the factors within the construct are representative in explaining that construct. It is calculated by the average of squared factor loadings resulting in the Average Variance Extracted (AVE) with a suggested threshold of 0,5 (Hair et. al, 2019; Sujati et. al, 2020). Hence, the initial model is calculated on the SmartPLS 4 software regarding these measures and presents the results in table 21.

	Loading	Cronbach's Alpha	Composity Reliability	AVE
INT1	0.899	0.911	0.938	0.790
INT2	0.924			
INT3	0.863			
INT4	0.868			
ATB1	0.817	0.823	0.876	0.588
ATB2	0.655			
ATB3	0.807			
ATB4	0.853			
ATB5	0.684			
SN1	0.821	0.813	0.865	0.565
SN2	0.581			
SN3	0.837			
SN4	0.711			
SN5	0.780			
PBC1	0.877	0.707	0.792	0.450
PBC2	0.831			
PBC3	0.438			
PBC4	0.558			
PBC5	0.536			
RA1	0.788	0.746	0.820	0.498
RA2	0.612			
RA3	0.317			
RA4	0.877			
RA5	0.789			
SP1	1.000	1.000	1.000	1.000
FPE	1.000	1.000	1.000	1.000
SEX	1.000	1.000	1.000	1.000

Table 21. Initial Factor Loadings, Cronbach's Alpha, Composity Reliability and AVE, n = 254. Extracted from SmartPLS 4. Table by author.

The Intention Construct presents factor loadings over 0,7 ranging from 0,863 (INT3) and 0,924 (INT2) representing a relevant contribution of all the factors to the construct. Also, the construct presents Cronbach's Alpha at 0,911 and Composite Reliability of 0,938, over the threshold of 0,7 and slightly below the 0,95 maximum recommended confirming the internal reliability of the construct. Lastly, the construct measures 0,790 AVE which is over the 0,5 threshold. Thus, the Intention Construct is accepted regarding its reliability and convergent validity.

Likewise, the Attitude towards the Behaviour construct exhibits factor loadings over the minimum threshold with the lower indicator, being the ATB2 with a score of

0,655. The results show an acceptable level of internal reliability with Cronbach's Alpha of 0,823, Composity Reliability of 0,876, and convergent validity over the minimum measuring AVE 0,588.

Similarly, the Subjective Norms Construct's factor loadings indicate values over the minimum threshold with the measurement ranging from 0,581 (SN2) and 0,837 (SN3), and internal consistency confirmed with Crobach's Alpha of 0,813 and Composity Reliability of 0,865. Also, the construct has an AVE of 0,565 signalling convergent validity.

The Social Preference construct revolves around a distinct factor developed by Falk et. al., (2021). The question was elaborated to elicit Social Preferences and it is a credible method of people's social preferences measurement. Thus, being a unique factor in the construct, the Loading, Cronbach's Alpha, Composity Reliability, and AVE do not hold practical application and this measure is accepted based on the original study that established it. Likewise, these measures of reliability are not applicable to sex and professional financial experience constructs nor to binary measures of socioeconomic characteristics.

On the other hand, the Perceived Behavioural Control and Risk Aversion demonstrate issues within the constructs. The first contains one factor (PBC 3) under the minimum threshold of 0,5 with 0,438 and AVE below 0,5 with 0,450. Although it presents internal reliability, the validity of the construct is not confirmed indicating that the factor PBC3 must be deleted. Thus, the analysis was carried out a second time (Table 22) excluding PBC3. The results improved supported by the remaining factor loadings presenting recalculated factor over 0,5 ranging from 0,537 (PBC4) to 0,896 (PBC1), Cronbach's Alpha and Composity Reliability measures of 0,716 and 0,806, respectively, and AVE of 0,523.

In this vein, the Risk Aversion construct comprises a single factor with a measurement below the threshold of 0.5, specifically RA3 (0.317). This is also reflected in a low Average Variance Extracted (AVE) measure of 0.498, indicating the necessity to consider excluding this factor from the analysis. Then, a second analysis was carried out on the statistical software deleting the lowest indicator RA3 and the results enhanced considerably (Table 22). In the second analysis, all the remaining reflective indicators presented factor loadings over 0,5, ranging from 0,595 (RA2) and 0,882 (RA5) with an AVE of 0,598 confirming the convergent validity. Also, reliability was ensured with Cronbach's Alpha and Composity Reliability of 0,768 and 0,854 respectively.

Therefore, the measurement model was validated containing 25 out of the initial 27 factors with the results shown in the following table.

	Loading	Cronbach's Alpha	Composity Reliability	AVE
INT1	0.899	0.911	0.938	0.790
INT2	0.924			
INT3	0.863			
INT4	0.868			
ATB1	0.817	0.823	0.876	0.588
ATB2	0.655			
ATB3	0.807			
ATB4	0.853			
ATB5	0.684			
SN1	0.821	0.813	0.865	0.565
SN2	0.581			
SN3	0.837			
SN4	0.711			
SN5	0.780			
PBC1	0.896	0.716	0.806	0.523
PBC2	0.832			
PBC4	0.537			
PBC5	0.556			
RA1	0.792	0.768	0.854	0.598
RA2	0.595			
RA4	0.882			
RA5	0.795			
SP1	1.000	1.000	1.000	1.000
FPE	1.000	1.000	1.000	1.000
SEX	1.000	1.000	1.000	1.000

Table 22. Factor Loadings, Cronbach's Alpha, Composity Reliability, and AVE, n = 254. Extracted from SmartPLS 4. Table by author.

Subsequent to conducting tests of internal consistency and reliability, it becomes imperative to establish the distinctiveness of each construct from the others. To achieve this, Hair et al. (2019) propose the utilisation of the Heterotrait-Monotrait Ratio (HTMT) to ascertain that the constructs exhibit limited correlation, thereby indicating their differentiation. In line with the recommendation, the results of the HTMT analysis revealed that all correlations among the constructs fall below the threshold of 0.85. Consequently, the divergent validity of the model was confirmed, affirming that each construct indeed measures different underlying concepts.

HTMT								
	ATB	INT	PBC	FMP	RA	SN	SP1	SEX
ATB								
INT	0.813							
PBC	0.669	0.773						
FMP	0.099	0.068	0.124					
RA	0.194	0.051	0.246	0.234				
SN	0.721	0.739	0.705	0.043	0.195			
SP1	0.271	0.300	0.368	0.006	0.118	0.196		
SEX	0.218	0.093	0.155	0.016	0.233	0.156	0.024	

Table 23. HTMT - Heterotrait-Monotrait Ratio, n = 254. Extracted from SmartPLS 4. Table by author.

Lastly, the formative indicators were tested concerning potential issues of colinearity by applying the Variance Inflation Factor (VIF) method as suggested by Hair et al. (2019). According to them, the resulting values should indicate less than 3 and must not exceed 5. In the test (table 24), the factors INT1 and INT2 reported values of 3.223 and 3.873 respectively. Still, the scores were below the threshold of 5 in which the issues of collinearity are critical ensuring that there are no variables explained by the other variables and therefore, all the variables are meaningful.

	VIF
ATB1	1.895
ATB2	1.912
ATB3	2.476
ATB4	2.393
ATB5	1.521
INT1	3.223
INT2	3.873
INT3	2.390
INT4	2.422
PBC1	1.713
PBC2	1.604
PBC4	1.280
PBC5	1.308
SEX	1.000
RA1	1.929
RA2	1.181
RA4	2.529
RA5	1.697
SN1	2.277
SN2	1.540
SN3	2.489
SN4	1.826
SN5	1.414
SP1	1.000
FMP	1.000

Table 24. Collinearity Statistics VIF, n = 254. Extracted from SmartPLS 4. Table by author.

In conclusion, the assessment of the model's measurement involved examining its reliability, convergent and divergent validity, as well as addressing multicollinearity concerns. As a result, factors PBC3 and RA3 were deemed unsuitable and subsequently excluded from the model. With these adjustments, the model demonstrates a satisfactory level of performance across all parameters. Consequently, the measurement model was confirmed enabling the appraisal of the project’s structural model.

5.3 Structural Model Analysis

Posteriorly to the measurement model's confirmation, the structural model evaluation was carried out through the Partial Least Squares of Structural Equation Modelling technique in the software SmartPLS 4. A percentile bootstrapping process of 10000 subsamples with a confidence level of 5% was applied to the model as recommended by Becker et al. (2023). According to them, percentile bootstrapping should be applied when the data is assumed to not be highly asymmetric while 5% of confidence minimises error type 2. The following diagram (Fig. 5) exhibits the graphical output of the analysis.

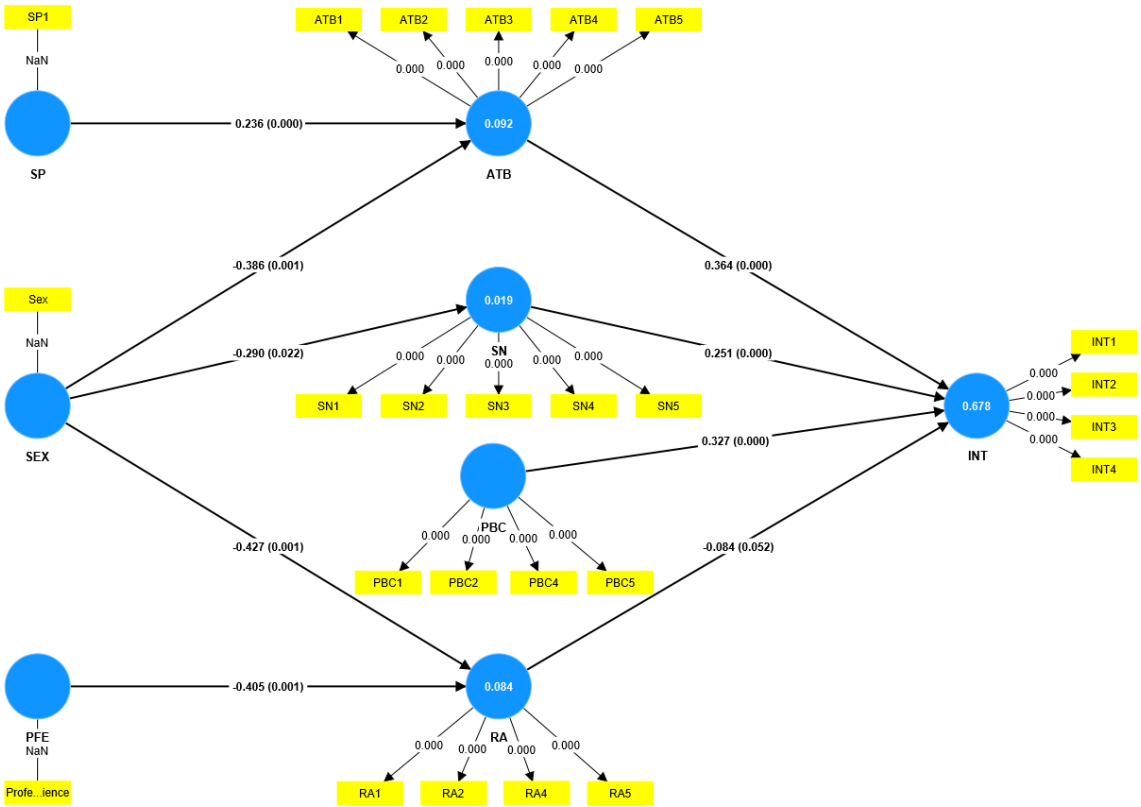

Fig. 5. Partial Least Squares of structural equation modelling, Constructed on SmartPLS 4. Figure by author.

The structural model resulted in R-Square (Coefficient of Determination) of 0.678. According to Hair et al. (2019) values over 0.500 and below 0.750 are considered to have a moderate predictive accuracy.

	R-square	R-square adjusted
INT	0.678	0.673

Table 25. Model R-square, n = 254. Extracted from SmartPLS 4. Table by author.

Moreover, the bootstrapping process allows the assessment of the project`s hypothesis. The first hypothesis (H1) is "*H1: Attitude towards impact investing positively influences Brazilian investors' intention to invest in impact investments"***.** The results (Table 26) show that the Attitudes Towards Behaviour construct has a medium effect size, with a positive and significant influence on the Intention Behaviour construct (f-square = 0.205, β = 0.368 and *p*-value < 0.001). Hence, the result supports H1.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
ATB -> INT	0.364	0.364	0.368	0.065	5.608	0.000	0.205

Table 26: Partial Least Squares of structural equation modelling ATB -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

The second hypothesis *"H2: Subjective Norms positively influence Brazilian investors' intention to invest in impact investments".* The results (table 27) demonstrate that the Subjective Norms construct has a small effect size, with a positive and significant influence on the Intention Behaviour construct (f-square = 0.088, β = 0.251 and *p*-value < 0.001). Therefore, the result supports the acceptance of H2.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
SN -> INT	0.251	0.251	0.249	0.054	4.638	0.000	0.088

Table 27: Partial Least Squares of structural equation modelling SN -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

Furthermore, the Perceived Behavioural Control (PBC) construct was measured in relation to the Intention Towards Impact Investing (INT) construct to test the hypothesis *"H3: Perceived Behavioural Control positively influences Brazilian investors' intention to invest in impact investments"*. The results confirm PBC with a medium significant positive effect on intention to invest in impact investments (f-square = 0.151, β =0.327 and *p*-value < 0.001). Thus, the hypothesis H3 is accepted.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
PBC -> INT	0.327	0.327	0.326	0.055	5.908	0.000	0.151

Table 28: Partial Least Squares of structural equation modelling PBC -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

The fourth hypothesis (*H4: Risk Aversion influences Brazilian investors' intention to invest in impact investments)* is rejected providing a non-significant negative influence on intention (f-square = 0.020, β = -0.084, *p*-value = 0.052). It means that the data do not present sufficient evidence of risk aversion influencing the intention. Nonetheless, the *p*-value approaches the 0.05 threshold, raising the possibility of a Type 2 error.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
RA -> INT	-0.084	-0.084	-0.086	0.044	1.940	0.052	0.020

Table 29: Partial Least Squares of structural equation modelling RA -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

The fifth hypothesis aims to test the indirect influence that Social Preference has on the Intention to Invest in impact investments. In fact, Social Preference has a significant small positive direct effect on Attitude (f-square = 0.061, β = 0.236 and *p*-value = <0.001). Still, the results reflect a significant positive indirect effect on intention (β = 0,086, *p*-value = 0.003) and therefore, H5 is supported.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
SP -> INT	0086	0.086	0.087	0.029	2.994	0.003

Table 30: Partial Least Squares of structural equation modelling, SP -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

In addition, the theoretical model of this project assumes based on the literature available that sex influence directly Attitudes (f-square = 0.037, β = -0.386, and *p*-value = 0.001), Subjective Norms (f-square = 0.019,β = -0.290, *p*-value = 0.022), and Risk Aversion (f-square = 0.045, β = 0,086, *p*-value = 0.001), which is confirmed through the analysis (See table 32). Still, having an influence on the three constructs, the sixth hypothesis implies that sex has an indirect effect on the intention to invest in impact investments. The results

(β = -0.177, *p* value = 0.015) confirm that sex has a significant indirect influence on investment intention towards impact investing and the H6 is accepted.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
SEX -> INT	-0.177	-0.177	-0.177	0.073	2.435	0.015

Table 31: Partial Least Squares of structural equation modelling SEX -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
SEX -> ATB	-0.386	-0.386	-0.387	0.120	3.213	0.001	0.037
SEX -> SN	-0.290	-0.290	-0.291	0.127	2.284	0.022	0.019
SEX -> RA	-0.427	-0.427	-0.442	0.129	3.321	0.001	0.045

Table 32: Partial Least Squares of structural equation modelling SEX ->ATB, SEX -> SN, SEX -> RA, n = 254. Extracted from SmartPLS 4. Table by author.

Lastly, the conceptual model of this project applied financial professional experience as a dummy variable representative of cognitive ability and financial literacy. The first is found in the literature as a predictor of risk aversion while the second has an influence on sustainable investments. Hence, the assumption that professional financial experience influences risk aversion is demonstrated (β = -0.405, p-value = 0.001). However, the indirect effects of professional financial experience on intention to invest in impact investments presents a small non-significant influence (β =0.034, p-value = 0.124). Therefore, H7 is rejected.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
PFE -> INT	0.034	0.034	0.036	0.022	1.540	0.124

Table 33: Partial Least Squares of structural equation modelling PFE -> INT, n = 254. Extracted from SmartPLS 4. Table by author.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
PFE -> RA	-0.405	–0.405	-0.416	0.122	3.326	0.001	0.044

Table 34: Partial Least Squares of structural equation modelling PFE -> RA, n = 254. Extracted from SmartPLS 4. Table by author.

Lastly, table 36 summarises the results of the hypothesis testing. In the next chapter, a detailed discussion concerning the results and previous studies is provided.

Hypothesis	Result
H1: ATB -> INT	Accepted
H2: SN -> INT	Accepted
H3: PBC -> INT	Accepted
H4: RA -> INT	Rejected
H5: SP -> INT	Accepted
H6: SEX -> INT	Accepted
H7: PFE -> INT	Rejected

Table 35: Summary of hypothesis testing. Table by author.

6. Discussion

This chapter aims to discuss the project`s findings making a parallel with existing literature on Impact Investing. The final goal is to proportionate a debate on the findings making sense of the results while positioning the relevance of the research for prospective studies. By doing so, I intend to discourse on the academic background and the importance of the study developed as well as the results originated in answering the research question: *How do non-financial factors influence Brazilian individual investors' intention to invest in impact investments?*

As mentioned previously, Impact Investing are investments made with the intention of generating financial returns alongside social and environmental measurable positive impact (GIIN, no date). Although similar themes are encountered in the literature in different forms such as Socially Responsible Investments, Responsible Investments, and Sustainable Investments, Impact Investing can be seen as the most extreme type of Responsible Investment (Migliavacca et al., 2022).

The topic is relatively new among researchers and a diverse space of investigation needs to be filled. Hence, this project contributes by expanding the literature on the investor`s intention behaviour by providing an assessment of non-financial factors` influence on individuals` intentions towards impact investing of a usually forgotten population, Brazilians. As the problem formulation chapter and literature review revealed, most of the studies (91%) around impact investments and correlated sub-themes are conducted on developed countries while emerging and frontier markets are put aside (Chalissery et. al., 2023; Talan and Sharma, 2018; Migliavacca et. al., 2022). It is undeniable the relevance of developing countries in being inserted in the discussion. For instance, the BRICS (Brazil, Russia, India, China and South Africa) had in 2021 an

estimated population of 3,2 billion people, over 40% of the world's population (Statista, 2023) and four (excluding South Africa) of them figuring among the 12 largest economies worldwide.

Moreover, research on impact investments is in its embrionary phase and still highly theoretical (Schätzlein et al., 2020). There is a disseminated understanding among scholars concerning the need of expanding studies on investors' preferences and behaviour to other populations (Patzold et al., 2022; Rathee and Aggarwal, 2022; Shanmugam et al., 2022; Bauer et al., 2021; Gutsche et al., 2021; Lagerkvist et al., 2020). Therefore, this project's contribution extends beyond merely introducing Brazil, a significant developing country, into the academic discourse. It involves employing previously applied methods that facilitate insightful discussions regarding both congruences and differences.

However, it is worth mentioning that although theoretical frameworks and questionnaire techniques are fairly similar, the methodological approach for data collection and sampling used in this project limit direct unthought comparisons. The sample's characteristics distribution is not similar to any of the studies mentioned throughout the project, nor representative of the Brazilian investor population. Also, the research is constructed to assess the intention and factors influencing it without the measurement of the actual behaviour. Still, the study presents robust valid results that generate insightful information concerning the influence of non-financial factors on Brazilian investors' intention to invest in impact investments. Market participants and academics find in this study an elucidating array of findings to develop further studies.

Overall, the project`s model presented a moderate predictive power of intention with a coefficient of determination (R^2) of 0.678. Although the objective of the study is not to develop the most predictive model, the results may indicate that additional

indicators are necessary to explain the dependent variable intention with higher accuracy. Nonetheless, the TPB demonstrated an adequate predictive capacity aligned with previous studies and assumptions derived from the literature review with the three related constructs (Attitude, Subjective Norms, and Perceived Behaviour Control) influencing the investment intention.

The first hypothesis (H1) aimed to test the influence that individuals' attitude towards impact investing exerts on individual's intention to invest in impact investments. In fact, the results point out a significant positive influence (Path Coefficient 0.364 and *p*-value < 0.001) of attitudes on the intention. It is in line with Rathee and Aggarwal (2022), Raut et. al (2021), Reyhanloo et. al. (2018), Daiyabu et. al. (2022), Akhtar and Das (2019) and Yee et al. (2022). As postulated by K. Levine (2012) it is logical that one's positive or negative attitude towards a topic effects its intention, and this result extends the literature on intention behaviour reinforcing the relevance of the determinant "attitude" on individuals' intention in the context of impact investments (Responsible Investments, in the broader sense).

In addition, the Subjective Norms (H2) construct presented a path coefficient of 0.251 (p-value < 0.001) supporting its influence on individual's intention to invest in impact investments. The results corroborate the results of Rathee and Aggarwal (2022), Akhtar and Das (2019), Raut et al. (2021) Daiyabu et. al. (2022), Yee et al. (2022) while it does not endorse Reyhanloo et al (2018) findings. Indeed, a variation in Subjective Norms is expected regarding their relevance in different places (Ajzen, 1991). It concerns the perception of the individual over the positive or negative judgment of others on one's behaviour. So, considering that people may receive social pressure in different environments it is arguably natural a variation in the results of this construct.

Furthermore, Perceived Behavioural Control's influence on intention among Brazilian Individuals (H3) is supported in this project (β = 0.327 and *p* value <000). In this regard, it is important to highlight that in the Theory of Planned Behaviour framework this construct directly influences intention, and actual behaviour. It means that while affecting the intention, one would transform intention into action only if one believes in their own capacity of accomplishing the behaviour successfully (Ajzen, 1991). Hence, the project's design, not anchored on a real investment case, may have derived answers from a lenient self-evaluation towards individuals capacity.

It is not meant to say that the result is not valid. On the contrary, the results are statistically significant, valid and reliable and it is aligned with peers Rathee and Aggarwal (2022) and Yee et al. (2022). Another note worth mentioning is that the Perceived Behavioural Control assesses the perception of the individuals and it is not necessarily aligned to the actual control. For instance, the indicator PBC5 (see section 2.6) asked if the surveyees' knowledge was enough to decide if they should or not engage in impact investments.

Moreover, the influence of Risk Aversion on investment intention towards impact investments was tested (H4). Accordingly, the results (β = -0,084, p-value = 0,052) do not support H5 and the hypothesis is rejected in line with Rathe and Aggarwal (2022) and Yee et al. (2022). However, as mentioned in Chapter 5.3, the *p* value is slightly over the threshold of 0.05 and it is possible that the result is incurring in an error type 2. It means that the possibility of rejecting a hypothesis that is true should be admitted. In fact, there is a vast literature supporting the concept of risk aversion influencing economic decisions and behaviour. It is based on the notion that people prefer the stability of the status quo rather than the possibility of having a negative output regardless of potential improvements. Nevertheless, several studies do not identify different defaults of status

quo bias such as loss aversion and regret avoidance influencing choices for responsible investments (Bauer et al, 2021; Samuelson and Zeckhauser 1988; Kahneman 1991; Tversky, and Kahneman 1991; Feldman, Miyamoto, and Loftus 1999; Nicolle et al. 2011). For this reason, besides the results and alignment with previous studies, this project indicates that risk aversion might have an influence on the intention towards impact investments, and that the results may be reflective of a non-probability sample. That said, further quantitative and qualitative investigation on the topic is advised.

In addition, indirect influence of social preferences on the individual`s intention to invest in impact investments (H5) was assessed. In this context, the framework adopted in this study assumed that given the nature of impact investments, altruism, in line with social welfare models, could be a predictor of investment intention by influencing Attitudes. This assumption was based on Bauer's et al. (2021) findings of strong causal relationship between the factor and the willingness of Dutch pension participants to increase responsible activities. Indeed, the results demonstrated that social preferences have a relevant influence on attitudes and a relevant indirect effect on intention (H5). The results of this hypothesis are of critical importance since financial market professionals often overlook the social preferences of their clients (Bauer et al., 2021). Further, social preferences presume that people are interested not only in their payoff but also in how it affects others (Becker et. al., 2012), which implies an additional utility perceived alongside the financial output. Thus, it can be argued that by assessing the social preferences of their clients, financial market professionals are providing a better service.

Furthermore, sociodemographic characteristics are often employed as explanatory factors to behaviour (Delsen & Lehr, 2019; Krupa et al., 2020; Apostolakis et al., 2018; Chamorro-Mera and Palacios-Gonzáles, 2019; Gutsche et al., 2023). As the analysis revealed sex has a direct effect on Attitudes, Subjective Norms and Risk Aversion, and

consequently, an indirect effect on intention to invest in impact investments. The findings support Gutsche et al. (2023), Weber et al. (2002), Ding et al. (2010) and relates to the United Nations (*Transforming Our World: The 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs*, n.d.). Yet, this study is distinctive showing sex as a relevant indirect explanatory factor in intention to invest in impact investments. Notably, the literature review exposed a variety of other socioeconomic factors that may influence one's behaviour. Thus, future researchers can explore both quantitative and qualitative studies on how these factors affect investment intention and behaviour towards impact investing.

Additionally, there are inferred differences among the clusters of professionals and non-professionals. The conceptual framework of this project assumes that financial professionals have a different approach to risk than their peers without a professional financial background. It is based on Dohmen et al. (2010) explanation that cognitive ability is negatively attached to risk aversion. Further, Raut et al. (2021) found that financial literacy is related to sustainable investments. That said, this research proposes that professional financial experience (PFE) might have an indirect effect on the intention to invest in impact investments. Indeed, PFE has a strong effect on risk aversion, however, it does not provide a significant indirect effect on investment intention towards Impact Investing.

Finally, it is worth mentioning that Impact Investing in the BRICS (Brazil, Russia, India, China, and South Africa) is still incipient. There are a limited number of impact investing instruments available, a lack of information, and insufficient financial intermediaries (Gusarova et al., 2020). That said, the research is possibly responsible for the first contact of many respondents to Impact Investing. Therefore, further studies are critical, possibly in partnership with a financial institution, in a real investment study case.

7. Conclusion

Throughout this project the Impact Investing Space, a relatively new type of investment with a diverse map of opportunities to investigate were explored. The literature review played a crucial role in this study, by pointing out influencing factors of the intention and actual behaviour of Impact investors and other sustainable options. However, most of the research is evolved in developed countries demonstrating a vast space to further evolve the topic in developing countries.

Enhancing the literature available, this project was completed to understand the effect of non-financial factors on Brazilian investors' intention to invest in impact investments. Even though they can not be extrapolated to the entire Brazilian investor population, the results are sound, credible and contribute to the available literature answering the research question: *How do non-financial factors influence Brazilian individual investors' intention to invest in impact investments?*

In conclusion, while answering the research question, evidence was provided that Attitude Towards Impact Investing, Subjective Norms, and Perceived Behaviour Control are factors that positively affect Brazilian investors' intention to invest in impact investments. Further, a significant indirect influence of Sex and Social Preferences on the Brazilian's intention to invest in impact investments was demonstrated. Nonetheless, the results do not support the direct and indirect influence of risk aversion and Professional Financial Experience respectively on the Brazilian individual's intention to invest in impact investments.

Lastly, this project provided avenues of research to scholars to further develop studies, and invites market participants to explore the context of impact investing.

8. Future Research

This project provided a deep literature review alongside sound findings. Still, there is room to dig deeper. Firstly, given the nature of the project, (educational and not funded) the resources limited the scope of the project to explore Brazilian investor's intention to invest in impact investments using a non-probability sample, which limits the generalisation of the findings. Therefore, it is highly suggested future research to be conducted with a representative sample for a reliable generalisation. Also, to work in partnership with an institution offering an impact investment product that would enable the measurement of the actual behaviour, would be an interesting avenue to explore..

Furthermore, a diverse set of factors emerged in the literature review that were not assessed in this project. The measurement of sociodemographic and other non-pecuniary factors such as financial literacy and impact investments knowledge would further enhance the comprehension of Brazilian investors' impact investment behaviour.

Also, cultural differences exert an influence on various economic decisions, and the literature review demonstrates a concentration of research in developed countries. Therefore, expanding the scope of investigation to encompass other countries and regions would enhance the understanding of the cross-cultural divergences effect on intention towards impact investing.

Finally, qualitative studies offer the opportunity to delve deeper into the underlying dynamics of each of the factors within individual countries.

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Appendix

1. Questionnaire in Portuguese

Olá

Meu nome é Daniel Moreno e sou estudante do mestrado em Business Economics na Universidade de Aalborg, na Dinamarca. Estou desenvolvendo minha pesquisa de dissertação de mestrado sobre a intenção de investimento dos investidores brasileiros em Investimentos de Impacto e coletando dados através de uma pesquisa. Eu agradeceria se você pudesse me ajudar e responder a pesquisa que leva aproximadamente 5 minutos.

As respostas são anônimas e os dados são usados para fins educacionais apenas. Todos os dados permanecerão privados e confidenciais.

Se você tiver alguma dúvida, por favor, entre em contato comigo através do e-mail drmo21@student.aau.dk

Muito obrigado,

Daniel Moreno

Perguntas Sociodemográficas

1 - Qual sua idade?

Less than 18 years old	18 - 30 years old	31 - 40 years old	41 - 50 years old	51 - 60 years old	61 - 70 years old	71 or more years old

Qual seu sexo?

Feminino	Masculino	Outros

3 - Qual sua escolaridade?

Ensino Fundamental incompleto	Ensino fundamental completo	Ensino médio completo	Ensino Superior completo	Pós graduação completa

4 - Qual sua ocupação?

Não estudo nem trabalho	Estudante	Empregado	Empresário ou atônomo	Aposentado

5 - Você atua no mercado financeiro?

Não	Sim

6 - Com que frequência você investe?

Nunca investi	Investi Apenas algumas vezes	Invisto de vez em quando	Invisto frequentemente	Estou continuamente investindo

7 - Qual afirmação descreve melhor seu objetivo ao investir?

Eu não invisto	Guardar dinheiro para emergências	Guardar dinheiro para viajar e coisas que eu gosto.	Comprar imóvel	Guardar para aposentadoria	Otimizar meus recursos	Proteger meus recursos da inflação	Outros

9 - Qual afirmação descreve melhor seu objetivo ao investir?

Sem renda	até R$2.499,00	de R$2.500,00 até R$4.999,00	de R$5.000,00 até R$7,499,00	de R$ 7.500,00 até R$ 9.999,00	de R$10.000,00 até R$12.499,00	R$ 12.500,00 ou mais	Prefiro não responder

POR FAVOR, LEIA O TEXTO A SEGUIR PARA RESPONDER AS QUESTÕES ABAIXO

Investimentos de Impacto são investimentos realizados com o intuito de gerar impacto positivo social e ambiental ao lado de retornos financeiros. Esses investimentos tem como objetivo alocar capital em oportunidades selecionadas que promovam soluções para grandes problemas sociais e ambientais e mensurem o resultado gerado pelo investimento. Ainda assim, com dupla meta (Financeira e Impacto Positivo), o investimento de impacto não pode priorizar um objetivo em detrimento do outro.

Ou seja, assim como os investimentos regulares, passa por rigorosa análise financeira para obter o melhor retorno financeiro possível com risco adequado. No entanto, investimentos de impacto não podem investir em uma opção que não promova benefícios sociais ou ambientais para a sociedade, mesmo que seja uma oportunidade financeira única.

Dito isto, por gentileza, responda as seguintes questões.

Como você avalia as seguintes afirmações?

Construct	Items	Como você avalia as seguintes afirmações	Source
Behaviour Intention	INT1	Eu desejo investir em investimentos de impacto.	Sivaramakrishman et al. (2017)
	INT2	Eu pretendo investir em investimentos de impacto.	Yee et al. (2022); Sivaramakrishnan et al. (2017)
	INT3	Eu investiria em investimentos de impacto a qualquer momento que uma oportunidade fosse apresentada.	Yee et al. (2022); Sivaramakrishnan et al. (2017)
	INT4	Eu vou procurar por investimentos de impacto para investir.	Yee et al. (2022)

Construct	Items	Como você avalia as seguintes afirmações	Source
Attitude Towards the Behaviour	ATB1	Eu acho que Investimentos de impacto são uma solução promissora para resolver desafios sociais e ambientais globais.	Rathee and Aggarwal et al. (2022); Reyhanloo et al. (2018)
	ATB2	Eu acho que investimentos deveriam considerar os danos sociais e ambientais que causam.	Gamel et al. (2017)
	ATB3	Eu acho que investimentos devem promover soluções ambientais e sociais.	Gamel et al. (2017)
	ATB4	Eu estou convencido que Investimentos de Impacto promovem soluçoes sociais e ambientais efetivamente.	Reyhanloo et al. (2018)
	ATB5	Eu acho que investimentos de impacto geram altos retornos financeiros.	Rathee and Aggarwal et al. (2022); Reyhanloo et al. (2018)

Construct	Items	Como você avalia as seguintes afirmações	Sources
Subjective Norms (SN)	SN1	Minha família espera que eu invista em Investimentos de Impacto	Yee et al. (2022); Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)
	SN2	Minha família ficaria ciente da minha decisão de investimentos	Ariely et al. (2009)

	SN3	Pessoas próximas a mim esperam que eu invista em investimentos de impacto.	Yee et al. (2022); Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)
	SN4	Pessoas próximas a mim ficariam cientes da minha decisão de investimentos.	Ariely et al. (2009)
	SN5	Existe uma forte necessidade de se fazer algo para a sociedade e ambiente, que é a razão pela qual eu devo investir com impacto	Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)

Construct	**Items**	**Como você avalia as seguintes afirmações**	**Source**
Perceived Behavioural Control (PBC)	PBC1	Eu me sinto confiante em investir em investimentos de impacto	Yee et al. (2022)
	PBC2	Eu posso superar obstáculos ou problemas que me impediram de investir em investimentos de impacto.	Yee et al. (2022)
	PBC3	Investir em investimentos de impacto depende de mim.	Yee et al. (2022)
	PBC4	Investir em investimentos de impacto é fácil.	Yee et al. (2022)
	PBC5	Eu acho que tenho conhecimento suficiente que me possibilita investir em investimentos de impacto.	Yee et al. (2022)

Construct	**Item**	**Question**	**Source**
Social Preference	SP1	Quão disposto você está a doar dinheiro para boas causas sem esperar nada em retorno?	Bauer et al. (2021); Falck et al., (2016)

Construct	**Items**	**Como você avalia as seguintes afirmações**	**Source**
Risk Aversion	RA1	O risco de perder dinheiro no mercado financeiro me causa stress.	Gamel et al. (2017); Yee et al. (2022)
	RA2	Estabilidade nos investimentos é mais importante para mim do que a chance de fazer lucro rapidamente.	Gamel et al. (2017); Yee et al. (2022)
	RA3	Continuidade dos meus investimentos é mais importante do que a chance de fazer lucro rapidamente.	Gamel et al. (2017); Yee et al. (2022)
	RA4	Mesmo uma perda financeira mínima me deixa nervoso.	Gamel et al. (2017); Yee et al. (2022)
	RA5	Eu sou contra a assumir risco em questões financeiras.	Gamel et al. (2017); Yee et al. (2022)

2. Questionnaire in English

Hello,

My name is Daniel Moreno and I am a student of Master in Business Economics at Aalborg University in Denmark. I am developing my Master's Thesis research on Brazilian investors' investment intention towards Impact Investing and collecting data through a survey. I would appreciate it if you could help me answer the survey which should take 5 minutes.

The answers are anonymous and data is used for educational purposes.

If you have any questions, please, contact me through the email drmo21@student.aau.dk

Best regards,

Daniel Moreno

How old are you?

Less than 18 years old	18 - 30 years old	31 - 40 years old	41 - 50 years old	51 - 60 years old	61 - 70 years old	71 or more years old

What is your Sex?

Female	Male	Other

What is your academic background?

Elementary school incomplete	Elementary school complete	High School complete	Bachelor complete	Posto graduation complete

What is your occupation?

Not working or studying	Student	Employed	Entrepreneur	Retired

Are you a financial market professional?

No	Yes

How often do you invest?

I have never invested	I have invested few times	I invest occasionally	I invest frequently	I am continuously investing

Which statement best define your investment objective

I do not invest	I want to save money for emergencies	I want to save money to travel and buy goods.	I want to buy a house	I want to save for my retirement	I want to optmize my savings	Protect my resources from inflation	Other

What is your monthly gross income?

No income	up to R$2.499,00	From R$2.500,00 to R$4.999,00	From R$5.000,00 to R$7,499,00	From R$ 7.500,00 to R$ 9.999,00	From R$10.000,00 to R$12.499,00	R$ 12.500,00 or more	I prefer to not say

PLEASE, READ THE FOLLOWING TEXT TO ANSWER THE QUESTIONS

Impact Investing is investments made with the intention of generating measurable social and environmental positive impact alongside financial returns. It aims to allocate capital to selected opportunities that promote solutions to major social and environmental problems and measure the outcome generated by the investment. Still, holding a double goal (Financial and Positive Impact), impact investing can not prioritize one objective over the other.

In other words, similarly to regular investments it goes through rigorous financial analysis to achieve the best financial return possible with adequate risk. However, the impact investment manager can not invest if it does not promote social or environmental benefits to society, even if it is a lifetime financial opportunity.

That said, please, answer the following questions.

Construct	**Items**	**How do you evaluate the following statements**	**Source**
Behaviour Intention	INT1	I desire to invest in Impact Investment funds.	Sivaramakrishman et al. (2017)
	INT2	I intend to invest in Impact Investment funds	Yee et al. (2022); Sivaramakrishnan et al. (2017)
	INT3	I would invest in impact investments whenever I am given the opportunity.	Yee et al. (2022); Sivaramakrishnan et al. (2017)
	INT4	I will search impact investment funds to invest.	Yee et al. (2022)

Construct	**Items**	**How do you evaluate the following statements**	**Source**
Attitude Towards the Behaviour	ATB1	I think Impact Investing is a promising solution to solve global social and environmental challenges.	Rathee and Aggarwal et al. (2022); Reyhanloo et al. (2018)
	ATB2	I think investments should take into consideration the social and environmental damage they cause.	Gamel et al. (2017)

	ATB3	I think investments should promote social and environmental solutions.	Gamel et al. (2017)
	ATB4	I am convinced that impact investments promote solutions to social and environmental challenges in an effective way	Reyhanloo et al. (2018)
	ATB5	I think impact investments yield high financial returns.	Rathee and Aggarwal et al. (2022); Reyhanloo et al. (2018)

Construct	**Items**	**How do you evaluate the following statements?**	**Sources**
Subjective Norms (SN)	SN1	My family members expect me to invest in impact investing	Yee et al. (2022); Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)
	SN2	My family members would be aware of my investment decision.	Ariely et al. (2009)
	SN3	People with whom I closely relate expect me to invest in impact investing	Yee et al. (2022); Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)
	SN4	People with whom I closely relate would be aware of my investment decision.	Ariely et al. (2009)

	SN5	There is a strong need to do something for the society and the environment, which is one of the reasons I should do impact investing	Rathee and Aggarwal et al. 2022; Reyhanloo et al. (2018)

Construct	**Items**	**How do you evaluate the following statements?**	**Source**
Perceived Behavioural Control (PBC)	PBC1	I feel confident about being able to engage in impact investments.	Yee et al. (2022)
	PBC2	I am able to overcome the obstacles or problems which could prevent me from engaging in impact investments.	Yee et al. (2022)
	PBC3	Engaging in impact investments is within my own control.	Yee et al. (2022)
	PBC4	Engaging in impact investments is easy.	Yee et al. (2022)
	PBC5	I think I have sufficient knowledge which enables me to engage in impact investments	Yee et al. (2022)

Construct	**Item**	**Question**	**Source**
Social Preference	SP1	How willing are you to give money to good causes without expecting anything in return?	Bauer et al. (2021); Falck et al., (2016)

Construct	**Items**	**How do you evaluate the following statements?**	**Source**
Risk Aversion	RA1	The risk of losing money on the financial market causes mental stress.	Gamel et al. (2017); Yee et al. (2022)
	RA2	Stability of my investments is more important to me than the chance of a quick profit	Gamel et al. (2017); Yee et al. (2022)
	RA3	Continuity of my investments is more important to me than the chance of a quick profit	Gamel et al. (2017); Yee et al. (2022)
	RA4	Even small financial losses make me nervous.	Gamel et al. (2017); Yee et al. (2022)
	RA5	I am reluctant to take risks regarding financial matters	Gamel et al. (2017); Yee et al. (2022)

3. Descriptive Data

Demographics	Outcome	N (254)	%
Gender	Female	89	35,0%
	Male	165	65,0%
Age	< 18	0	0,0%
	18 - 30	12	4,7%
	31 - 40	67	26,4%
	41 - 50	45	17,7%
	51 - 60	54	21,3%
	61-70	63	24,8%
	> 70	13	5,1%
Academic Background	Elementary school incomplete	0	0,0%
	Elementary school complete	2	0,8%
	High School complete	8	3,1%
	Bachelor complete	83	32,7%
	Post graduation complete	161	63,4%
Occupation	Not working or studying	1	0,4%
	Student	0	0,0%
	Employed	120	47,2%
	Entrepreneur	88	34,6%
	Retired	45	17,7%
Financial market professional	Yes	114	44,9%
	No	140	55,1%
Investing frequency	I have never invested		0,0%
	I have invested a few times	46	18,1%
	I invest occasionally	75	29,5%
	I invest frequently	67	26,4%
	I am continuously investing	66	26,0%
Financial Objectives	I do not invest	1	0,4%
	I want to save money for emerg	29	11,4%
	I want to save money to travel a	15	5,9%
	I want to buy a house	8	3,1%
	I want to save for my retiremen	67	26,4%
	I want to optmize my savings	99	39,0%
	Protect my resources from infla	24	9,4%
	Other	11	4,3%
Income	No income	1	0,4%
	up to R$2.499,00	6	2,4%
	From R$2.500,00 to R$4.999,0	24	9,4%
	From R$5.000,00 to R$7,499,0	35	13,8%
	From R$ 7.500,00 to R$ 9.999,	30	11,8%
	From R$10.000,00 to R$12.49	29	11,4%
	R$ 12.500,00 or more	109	42,9%
	I prefer to not say	20	7,9%

Appendix 3. Descriptive data, n = 254. Extracted from Google Survey Tool.

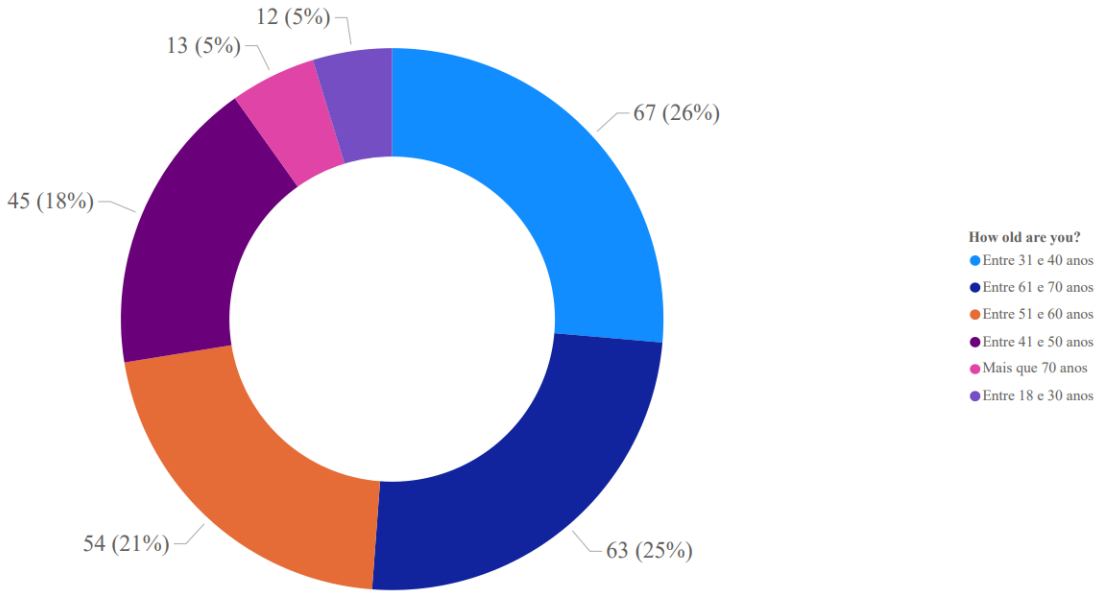
4. Descriptive Data - Parameters

	Min	Max	Median	Average	Standard Deviation
INT1	1	7	5	4,71	1,80
INT2	1	7	4	4,33	1,78
INT3	1	7	4	4,17	1,95
INT4	1	7	4	3,89	1,90
ATB1	1	7	5	5,00	1,88
ATB2	1	7	7	5,80	1,56
ATB3	1	7	6	5,41	1,67
ATB4	1	7	5	4,43	1,77
ATB5	1	7	4	3,96	1,48
SN1	1	7	3	2,86	1,74
SN2	1	7	5	4,60	2,15
SN3	1	7	3	2,97	1,76
SN4	1	7	4	3,61	2,09
SN5	1	7	5	4,56	1,84
PBC1	1	7	4	3,83	1,87
PBC2	1	7	4	4,41	1,60
PBC3	1	7	6	5,20	1,76
PBC4	1	7	3	3,34	1,59
PBC5	1	7	3	3,11	2,00
SP1	1	7	4	3,96	1,93
RA1	1	7	5	4,79	1,98
RA2	1	7	6	5,35	1,53
RA3	1	7	6	5,43	1,41
RA4	1	7	4	3,93	2,05
RA5	1	7	4	4,00	2,00

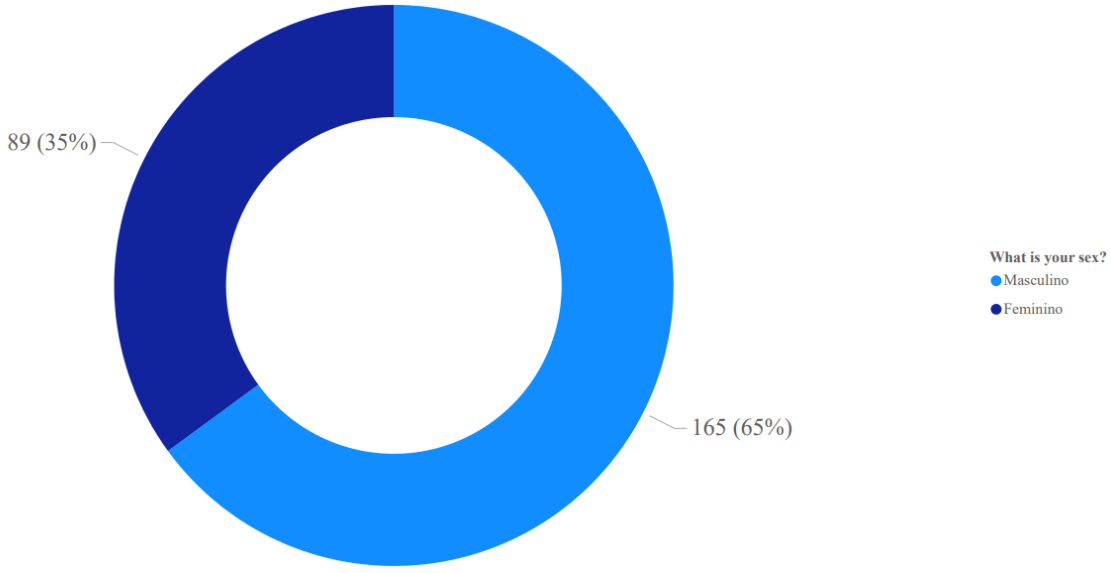
Appendix 4. Descriptive data parameters, n = 254. Extracted from Google Survey Tool.

5. Questionnaire Results - Graphics

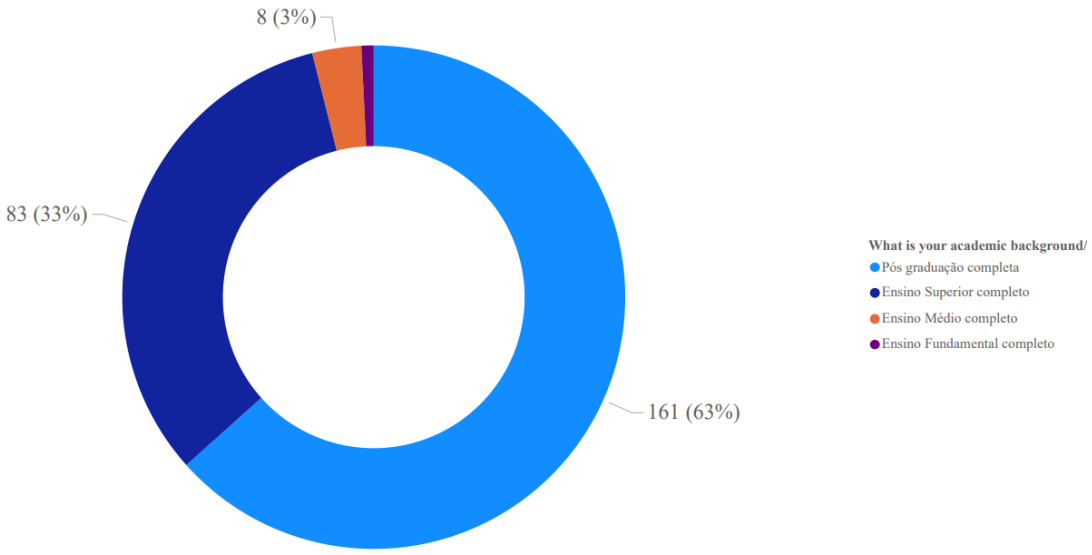
How old are you?



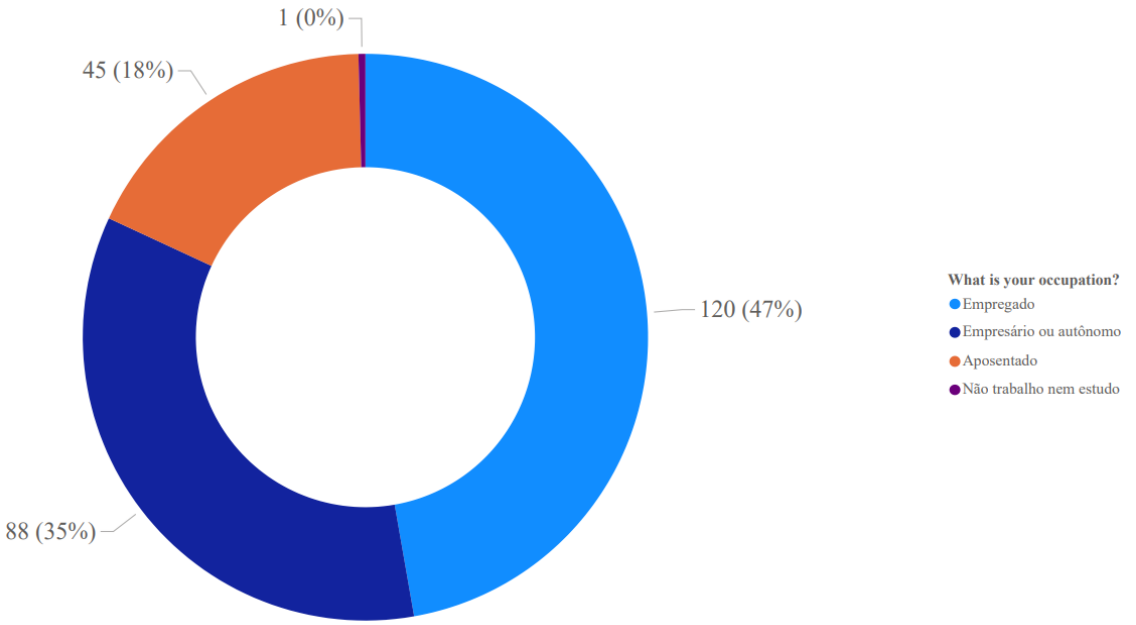
What is your sex?



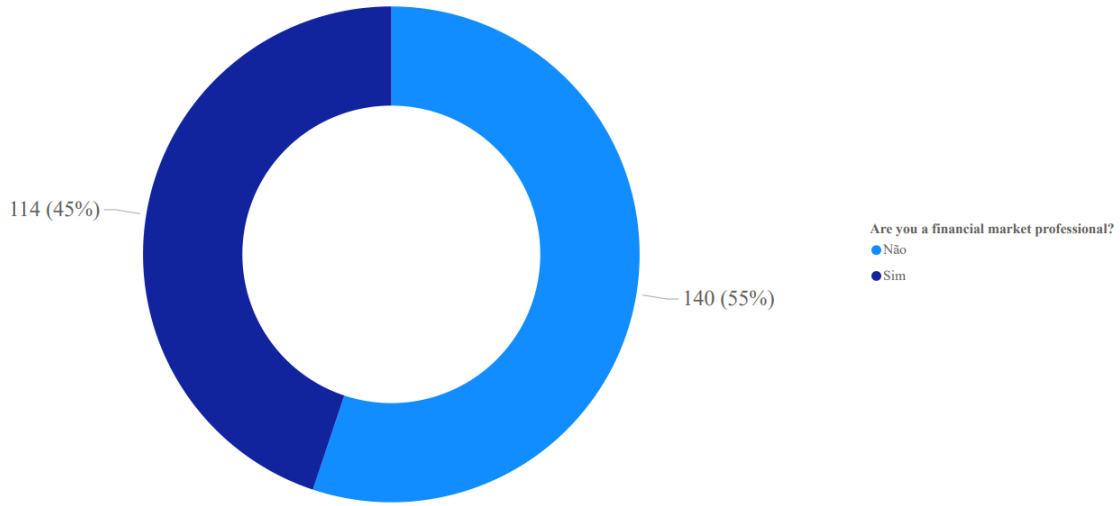
What is your academic background?



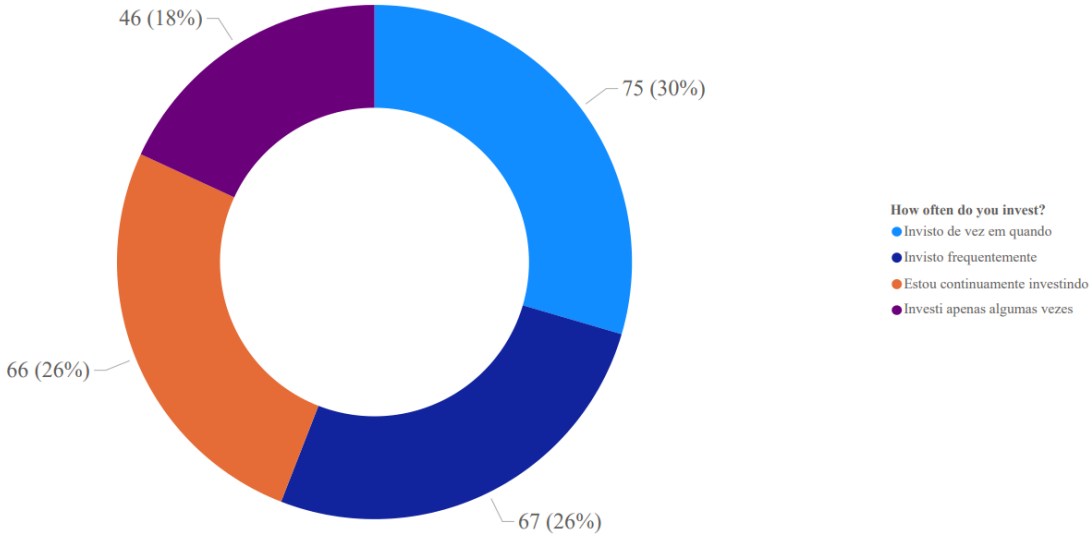
What is your occupation?



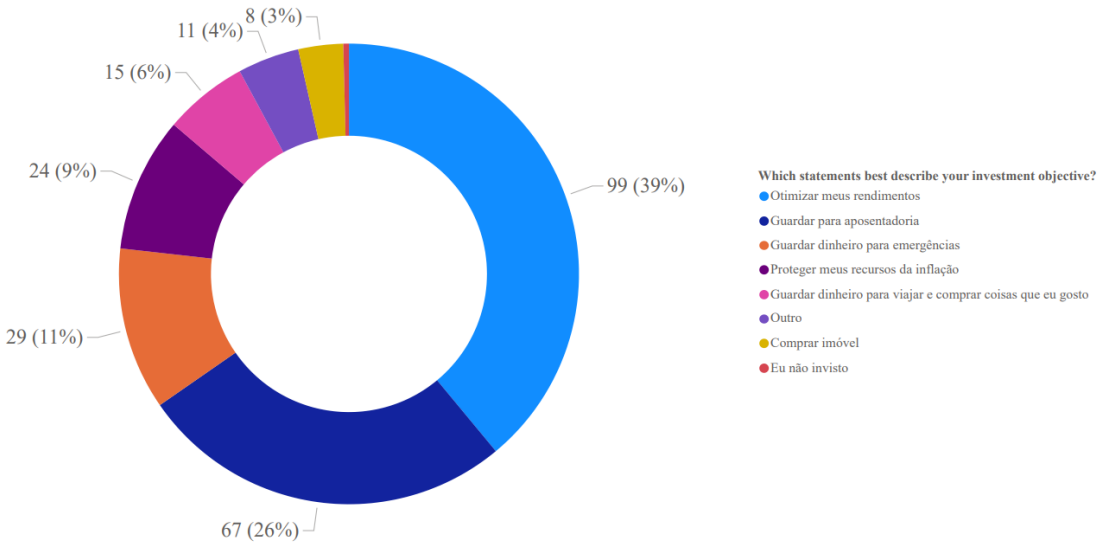
Are you a financial market professional?



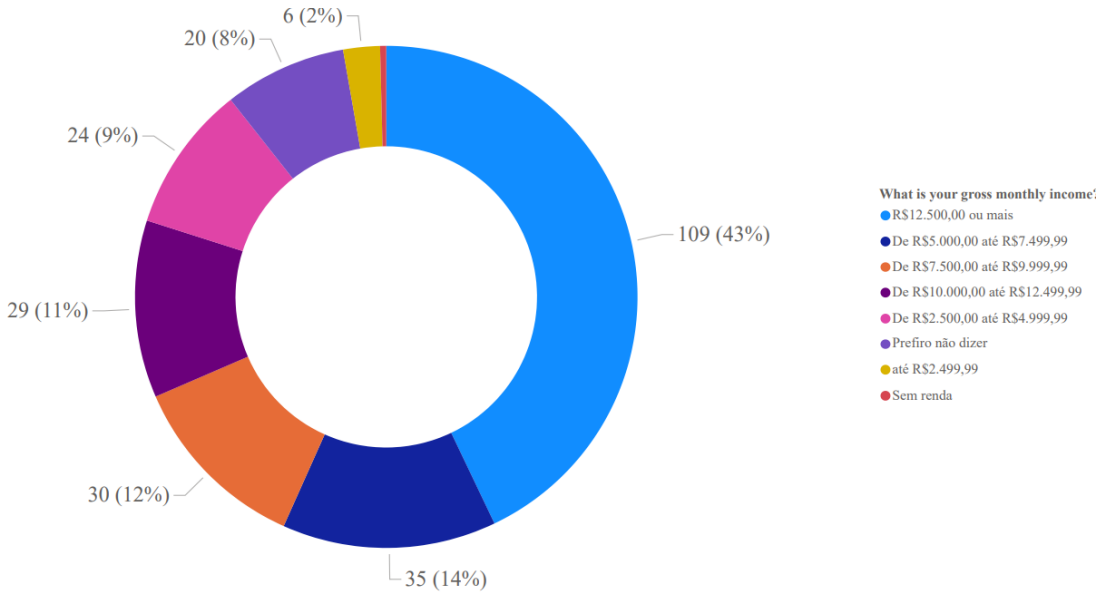
How often do you invest?



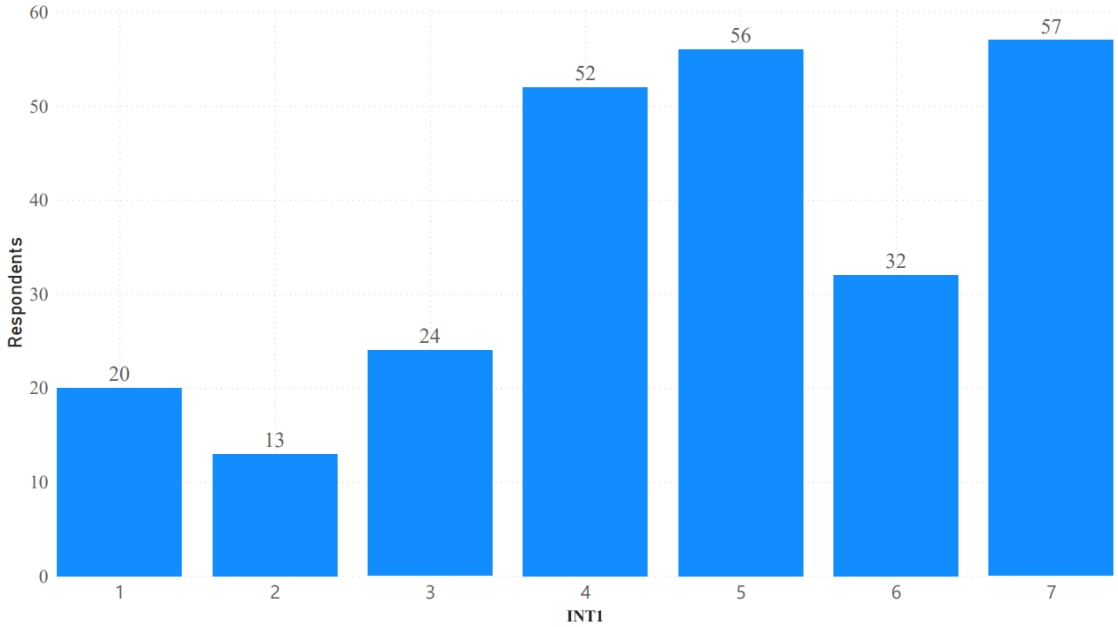
Which statement best define your investment objective ?



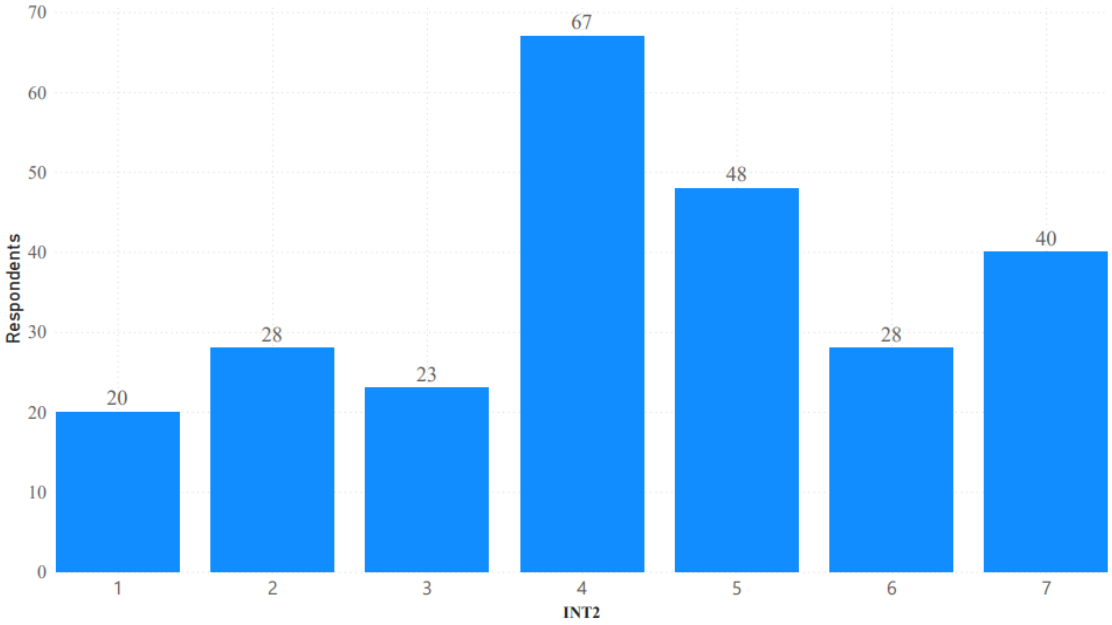
What is your monthly gross income?



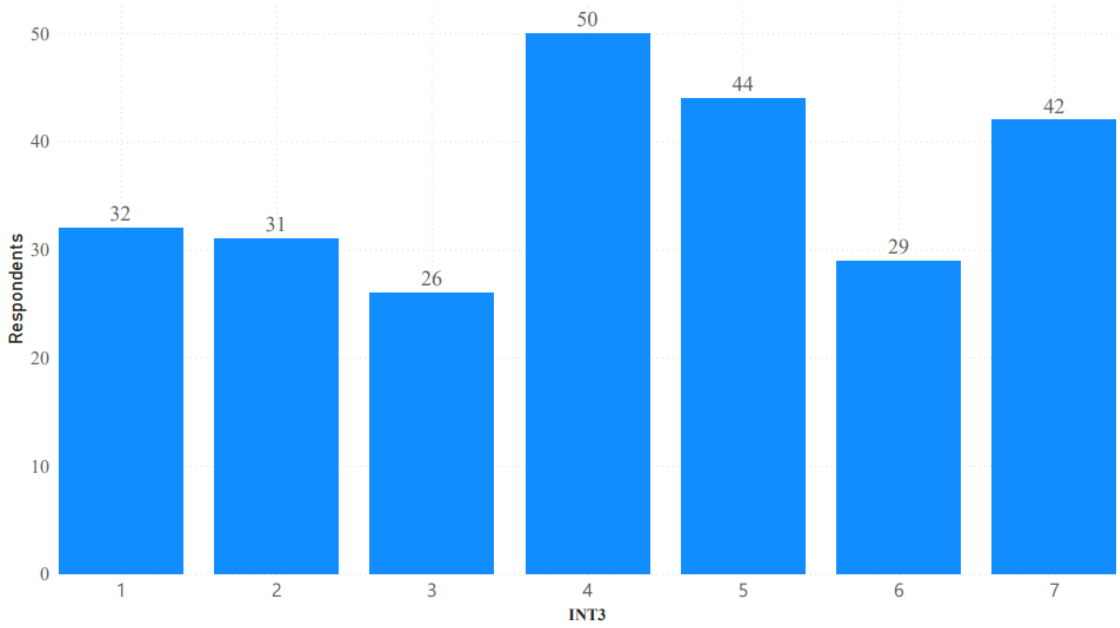
INT 1 - I intend to invest in Impact Investment funds.



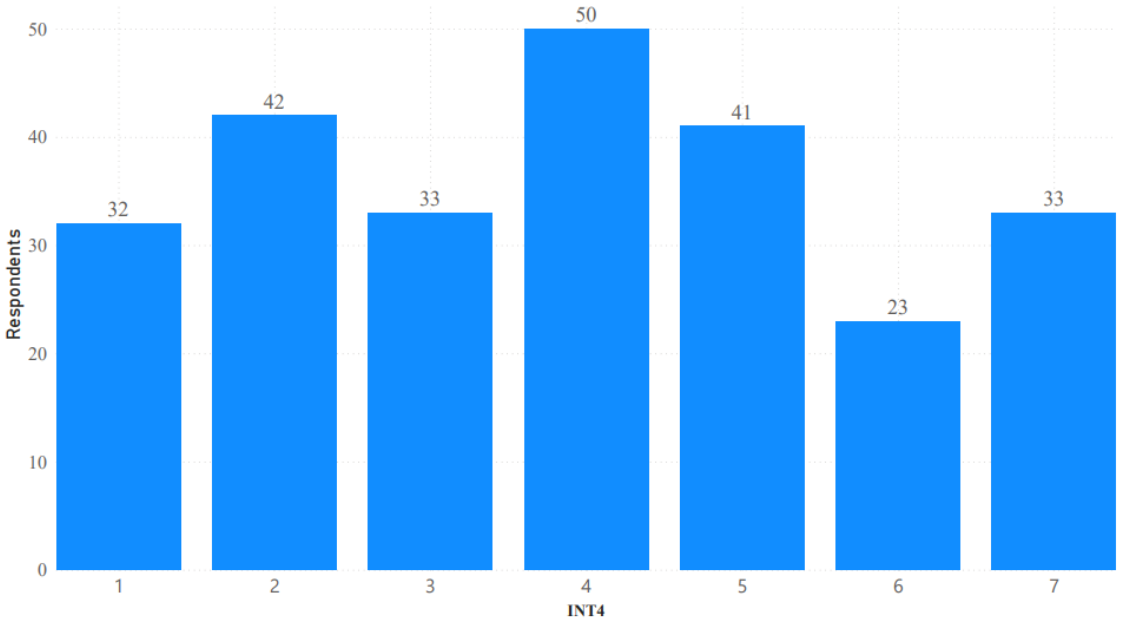
INT2 - I want to invest in Impact Investment funds



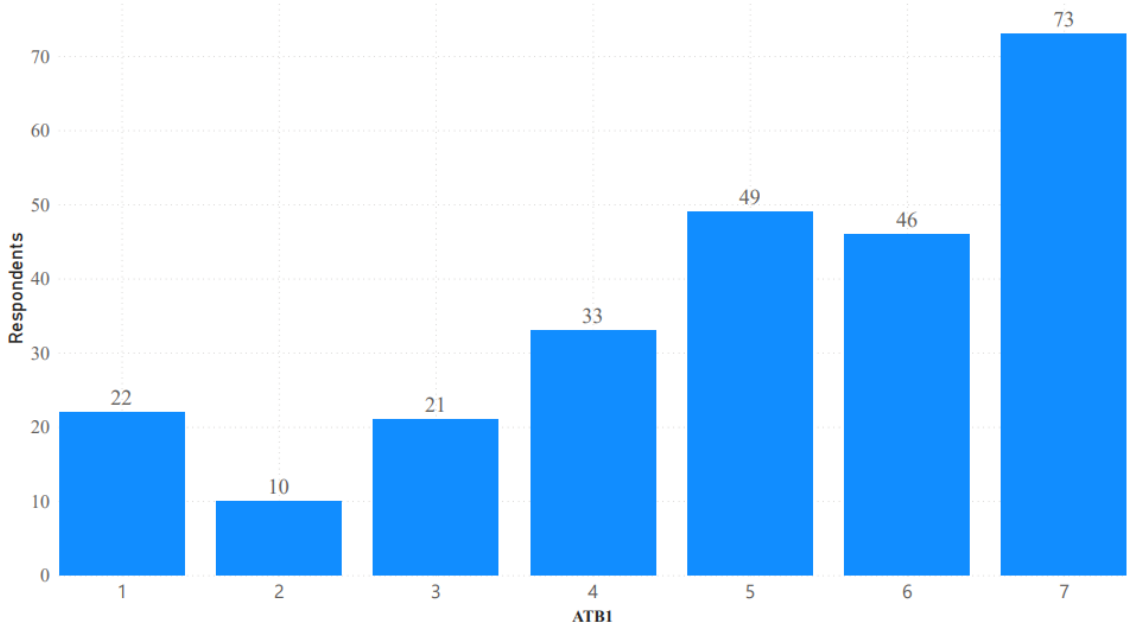
INT3 - I would invest in impact investments whenever I am given the opportunity.



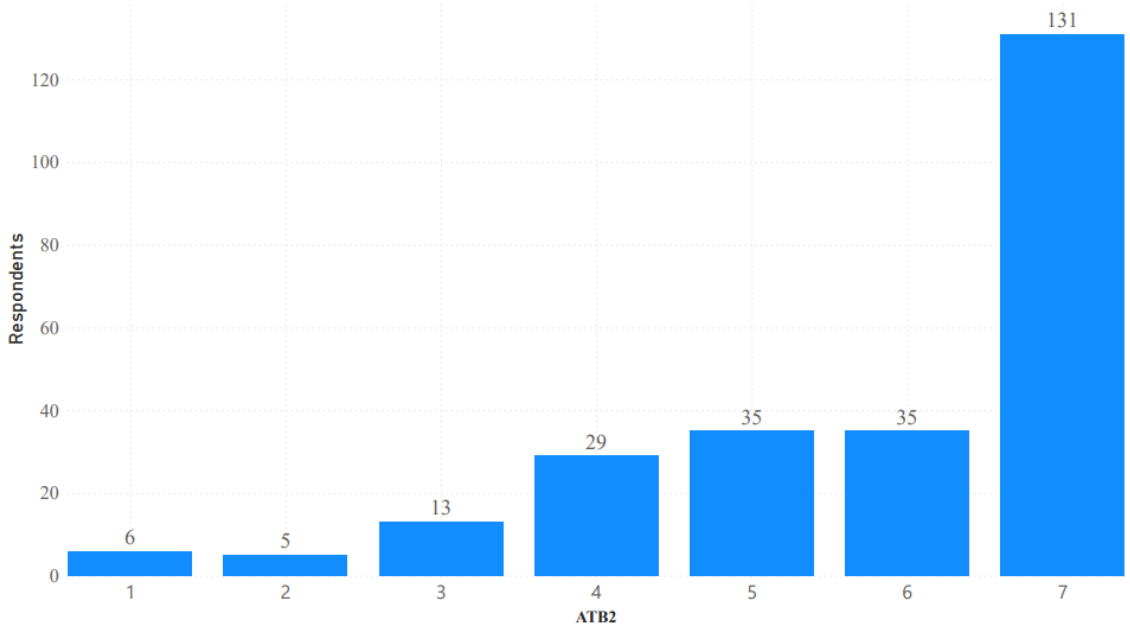
INT4 - I will search impact investment funds to invest.



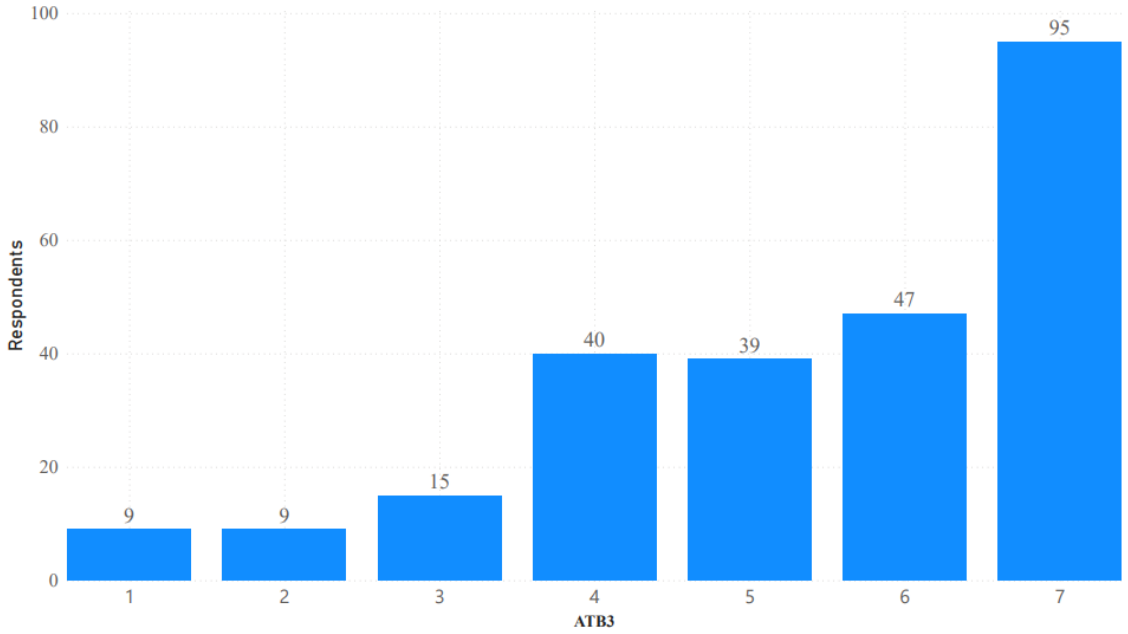
ATB1 - I think Impact Investing is a promising solution to solve global social and environmental challenges.



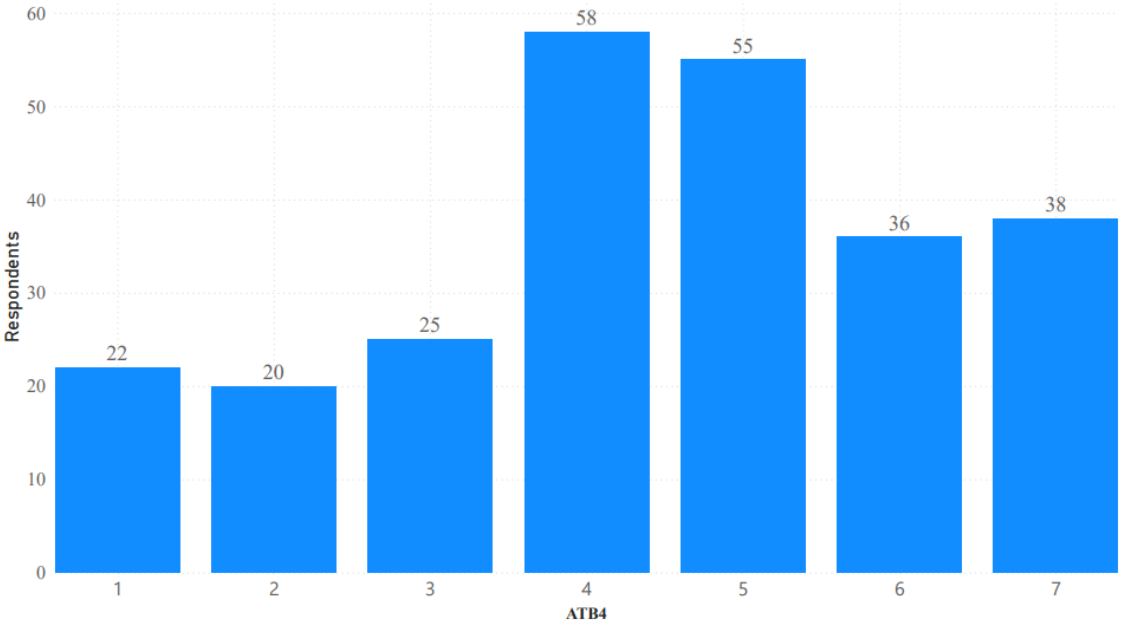
ATB2 - I think investments should take into consideration the social and environmental damage they cause



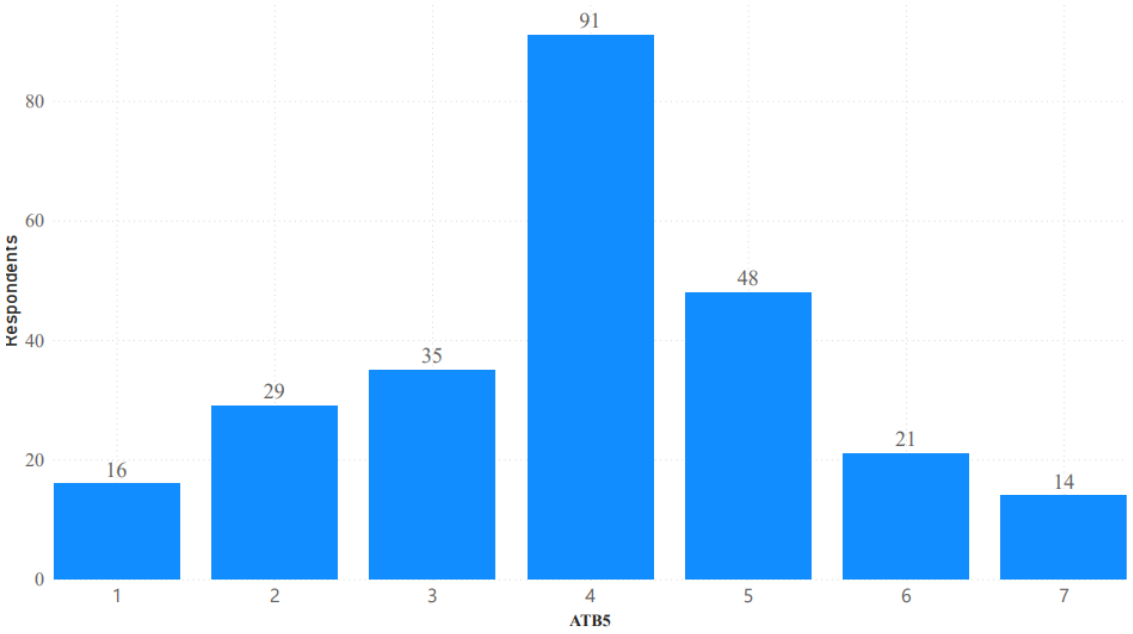
ATB3 - I think investments should promote social and environmental solutions.



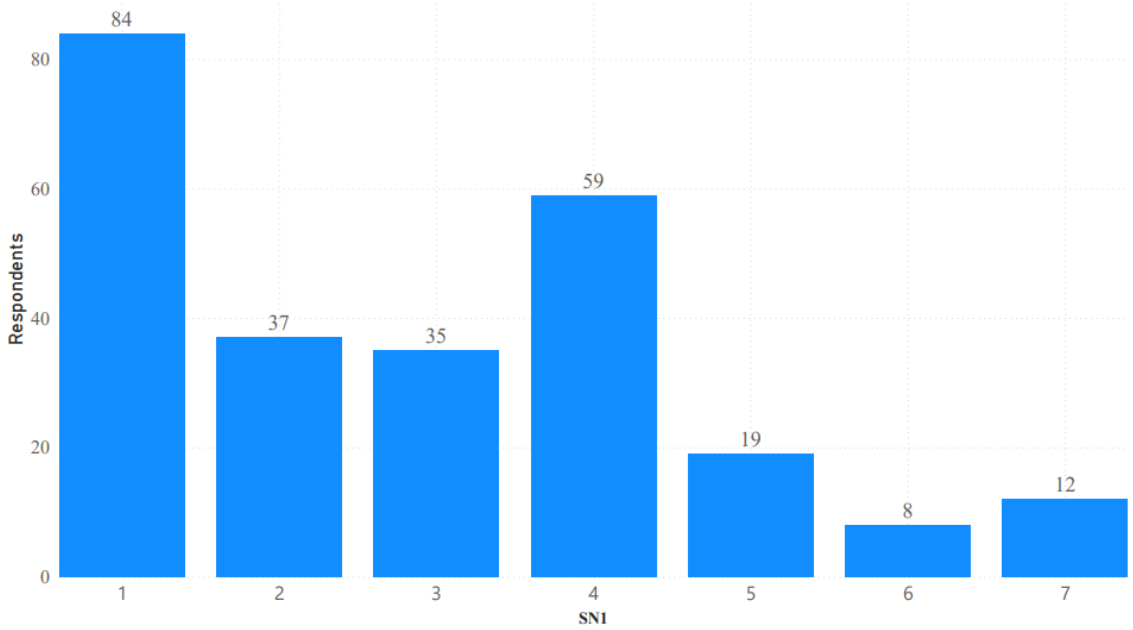
ATB4 - I am convinced that impact investments promote solutions to social and environmental challenges in an effective way



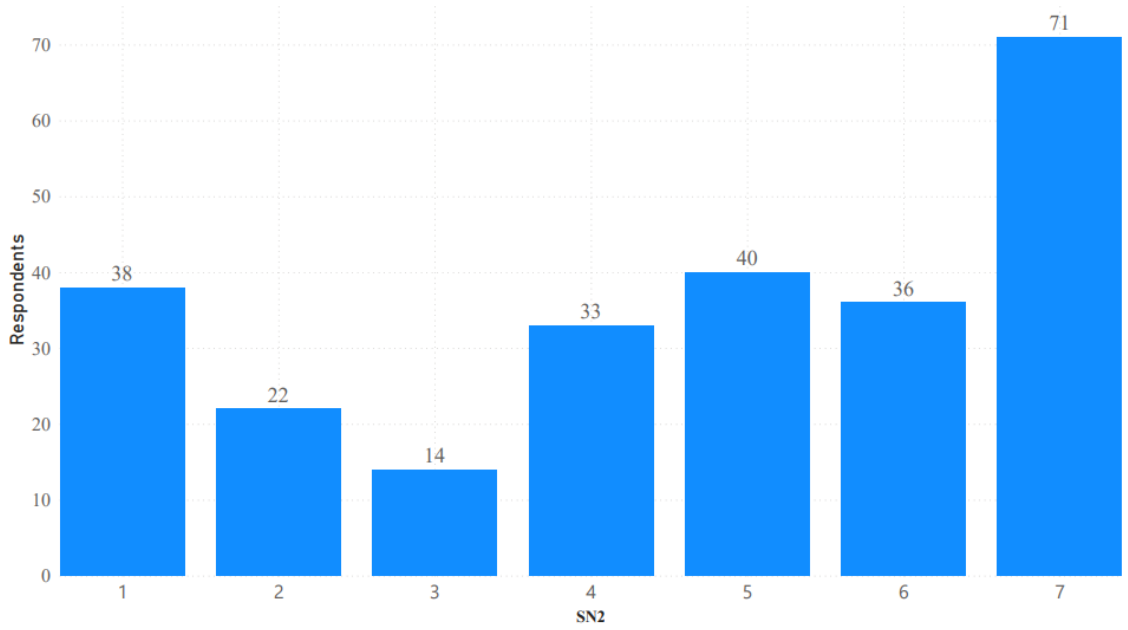
ATB5 - I think impact investments yield high financial returns.



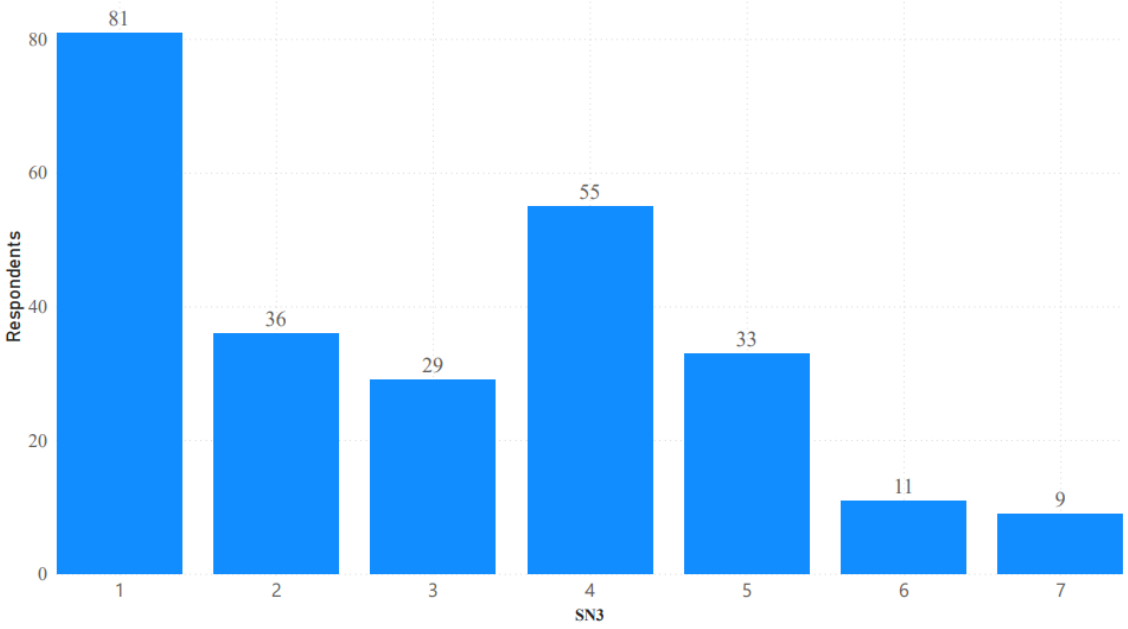
SN1 - My family members expect me to invest in impact investing



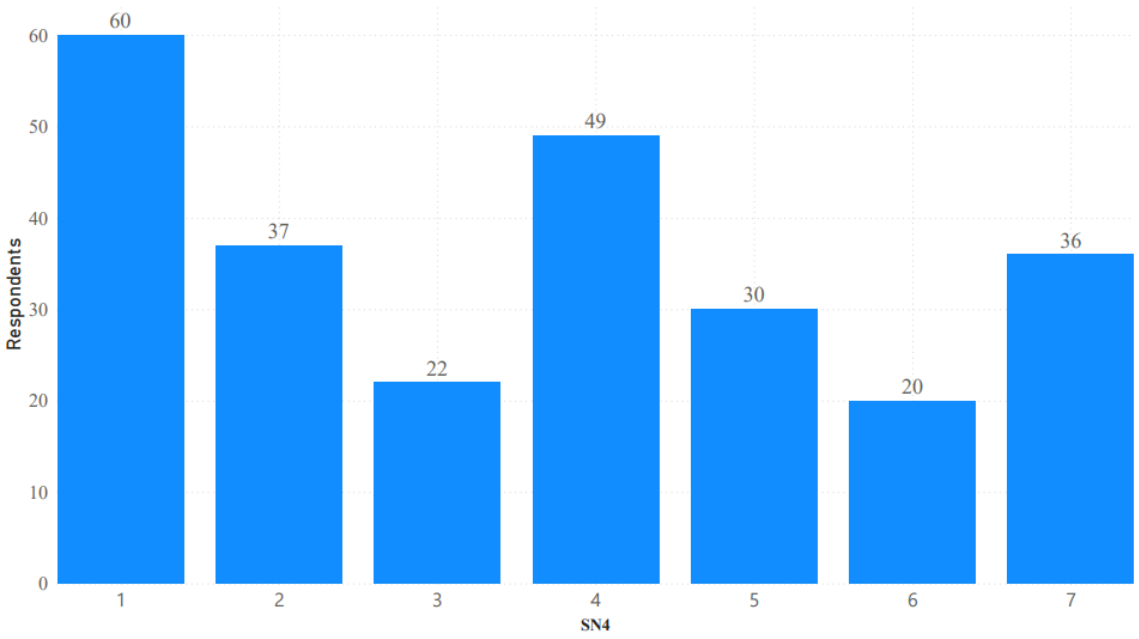
SN2 - My family members would be aware of my investment decision.



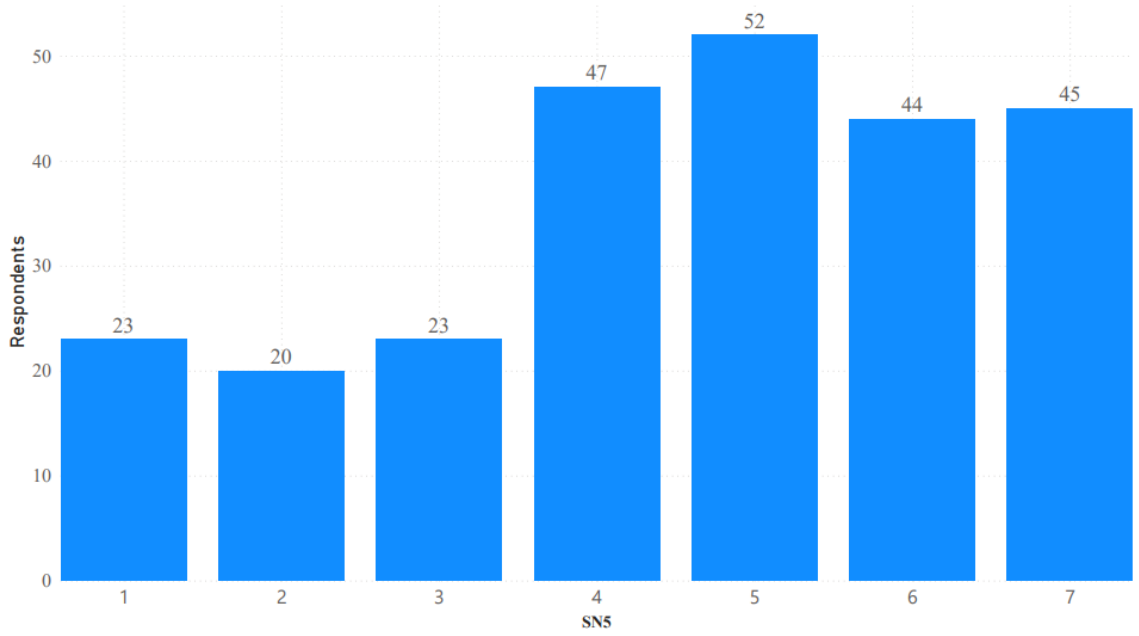
SN3 - People with whom I closely relate expect me to invest in impact investing



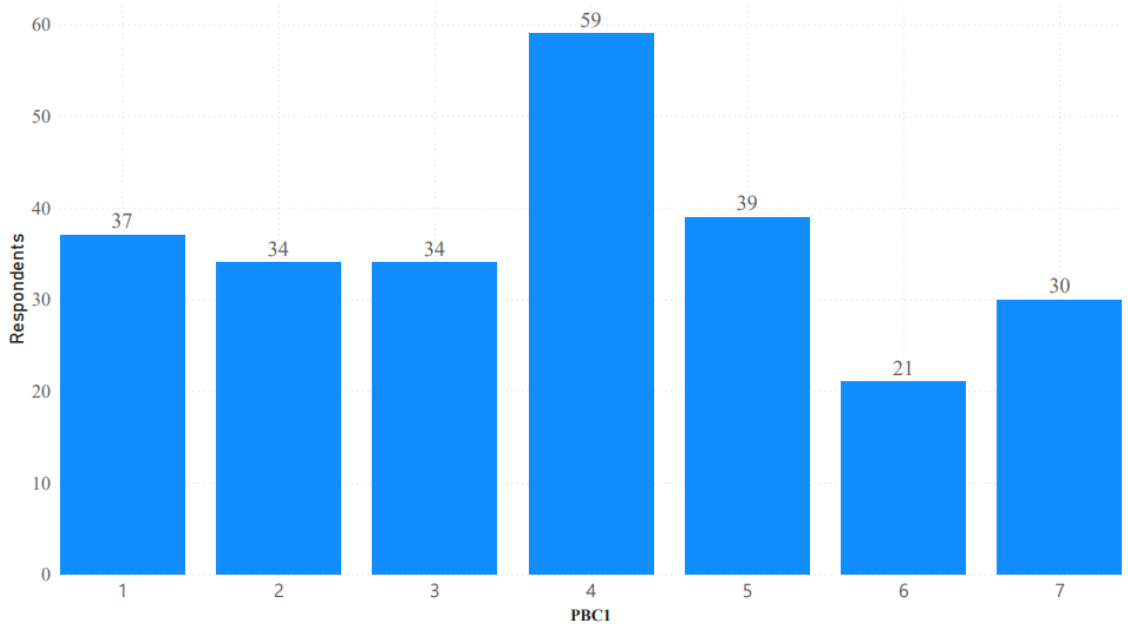
SN4 - People with whom I closely relate would be aware of my investment decision



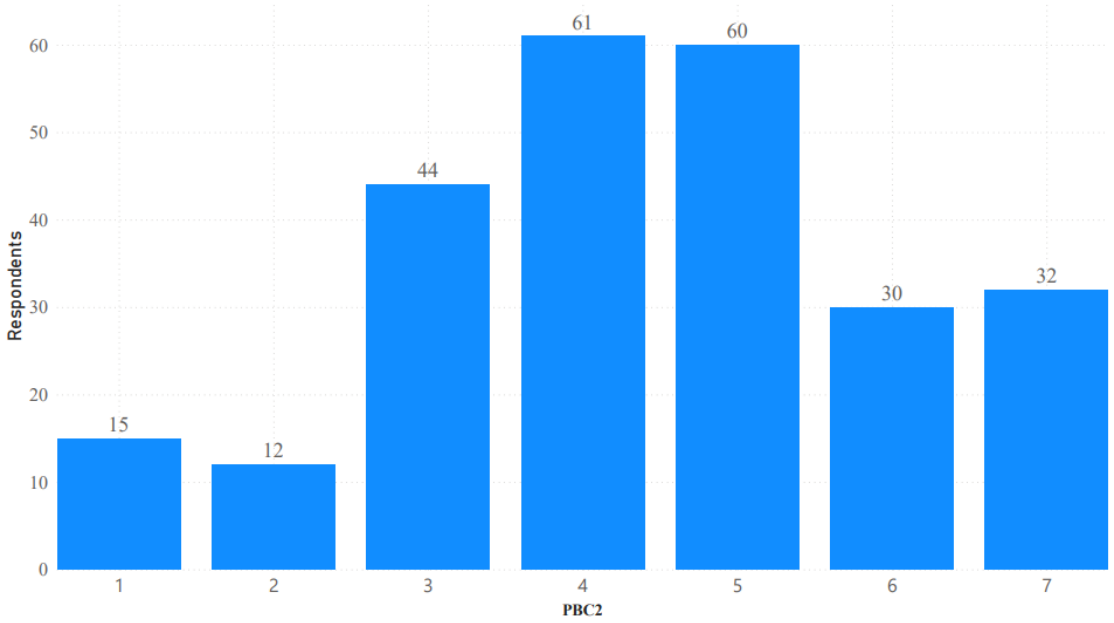
SN5 - There is a strong need to do something for the society and the environment, which is one of the reasons I should do impact investing



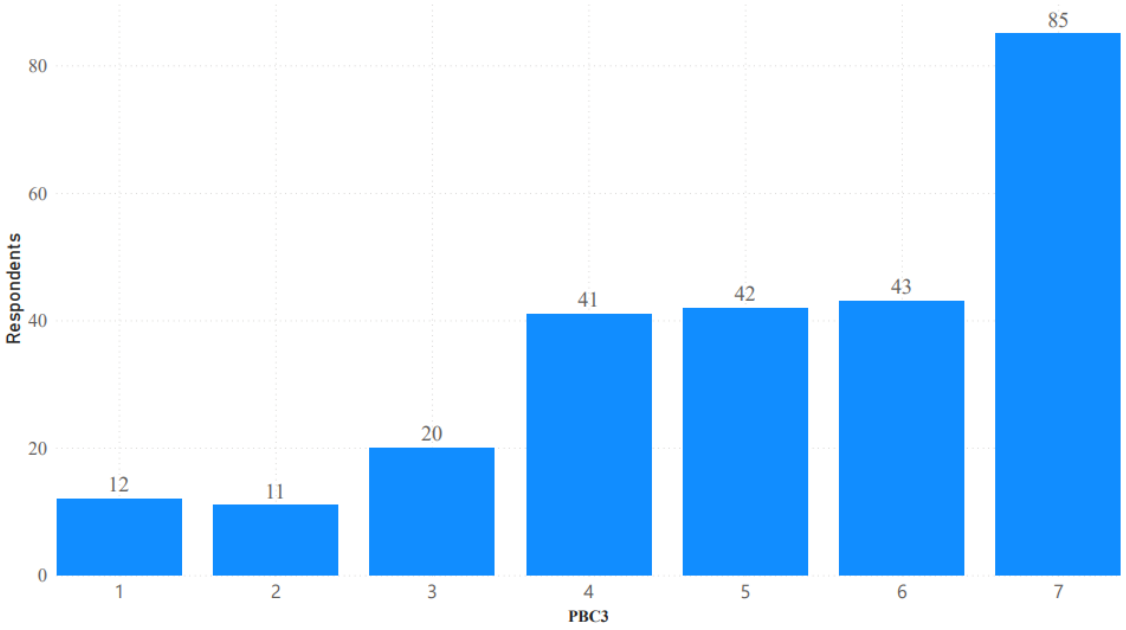
PBC1 - I feel confident about being able to engage in impact investments



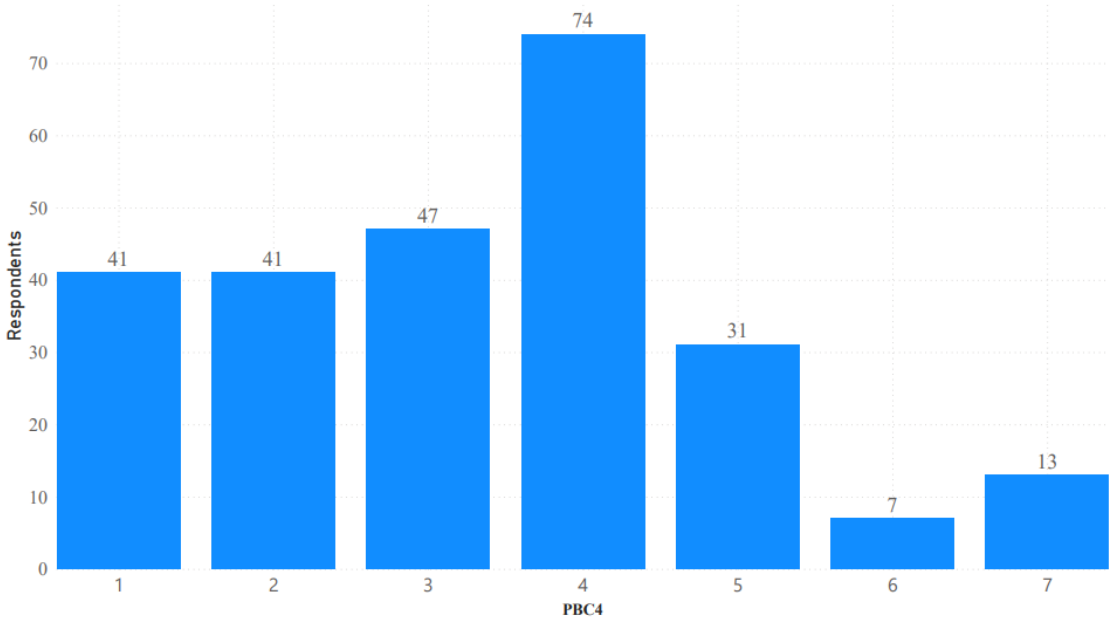
PBC2 - I am able to overcome the obstacles or problems which could prevent me from engaging in impact investments.



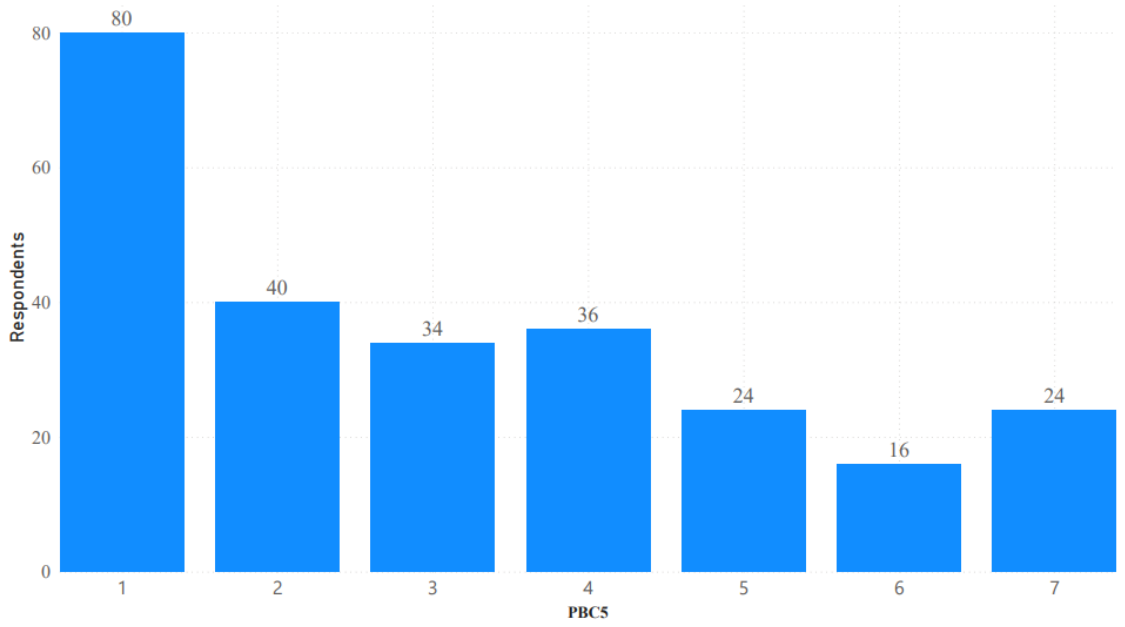
PBC3 - Engaging in impact investments is within my own control.



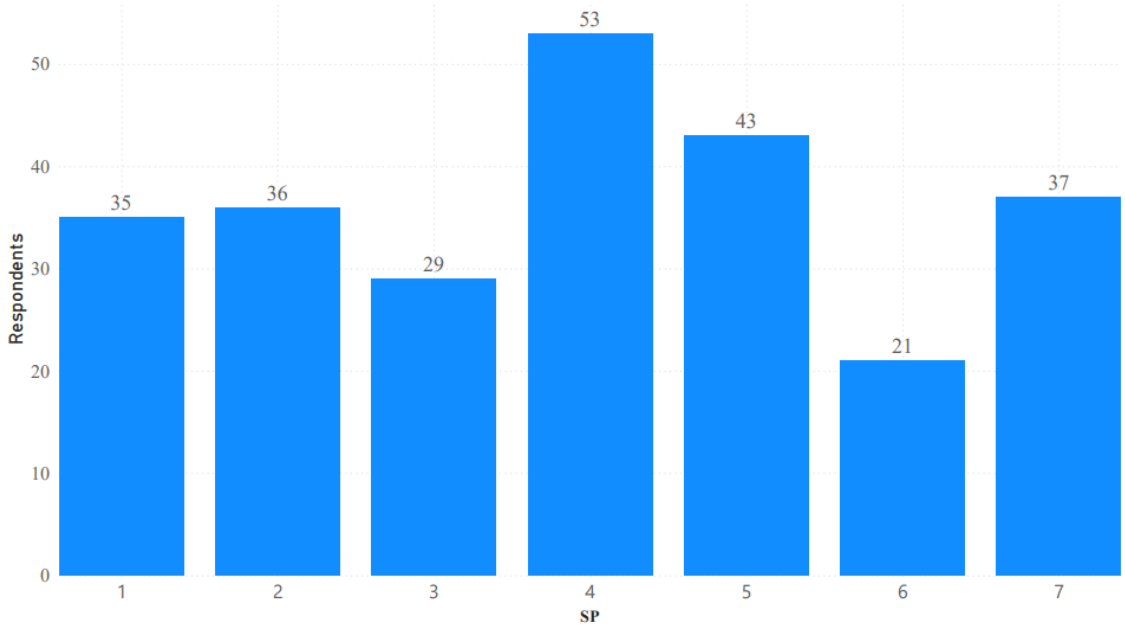
PBC4 - Engaging in impact investments is easy.



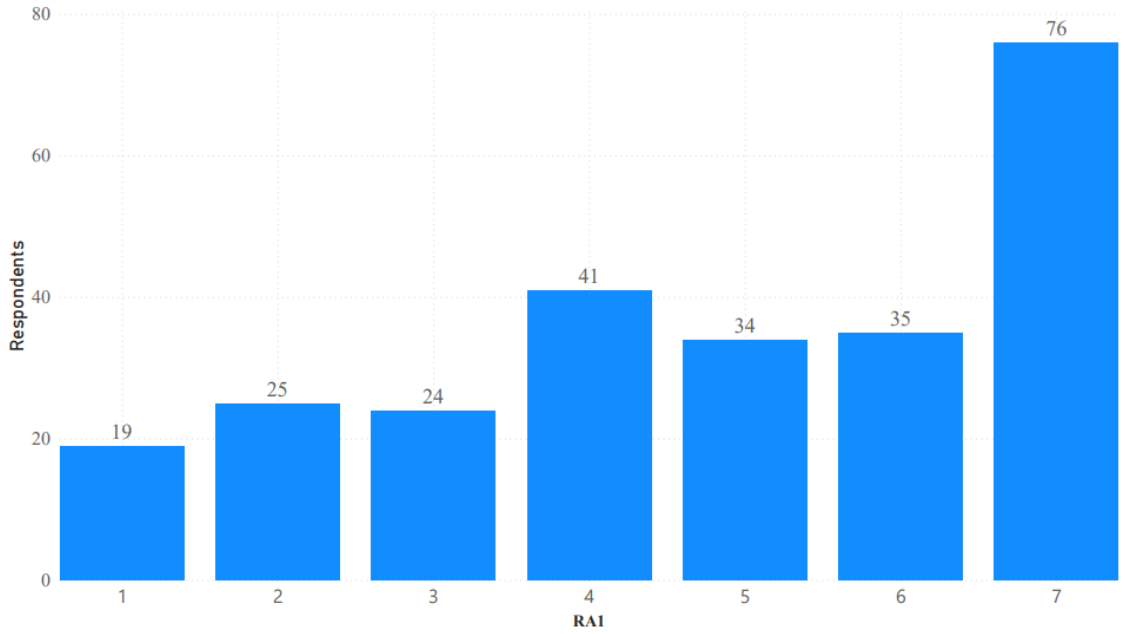
PBC5 - I think I have sufficient knowledge which enables me to engage in impact investments



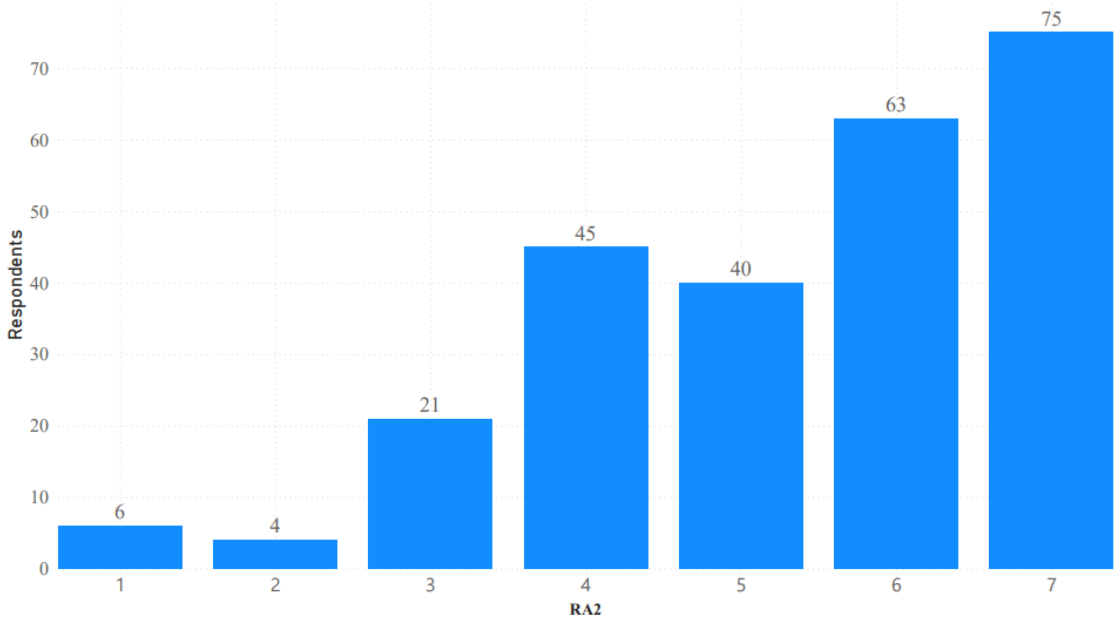
SP - How willing are you to give money to good causes without expecting anything in return?



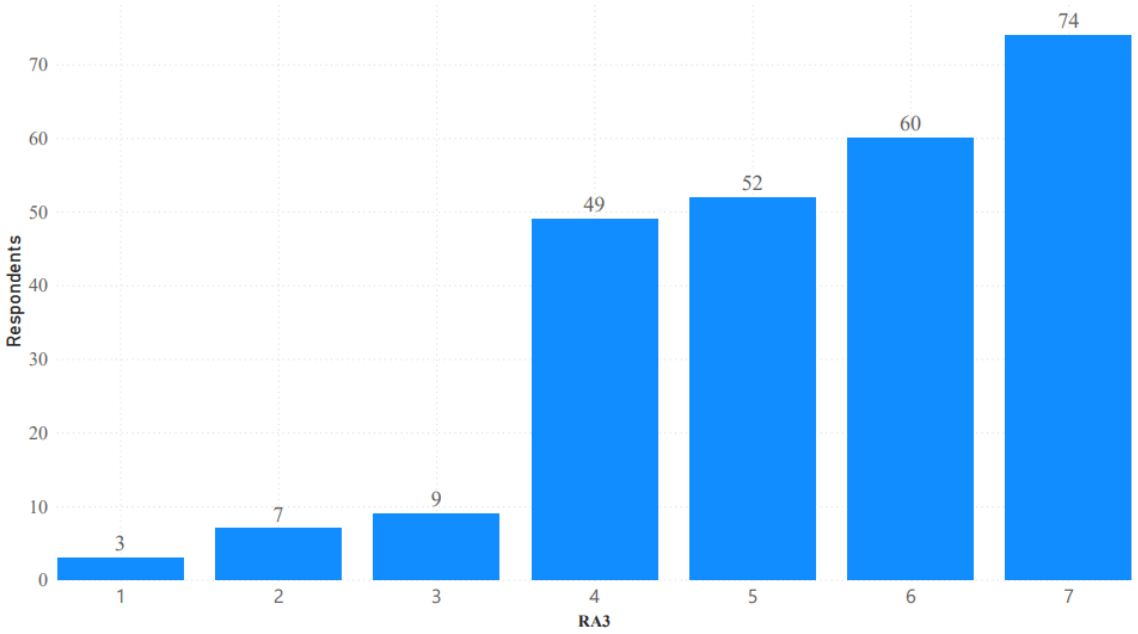
RA1 - The risk of losing money on the financial market causes mental stress.



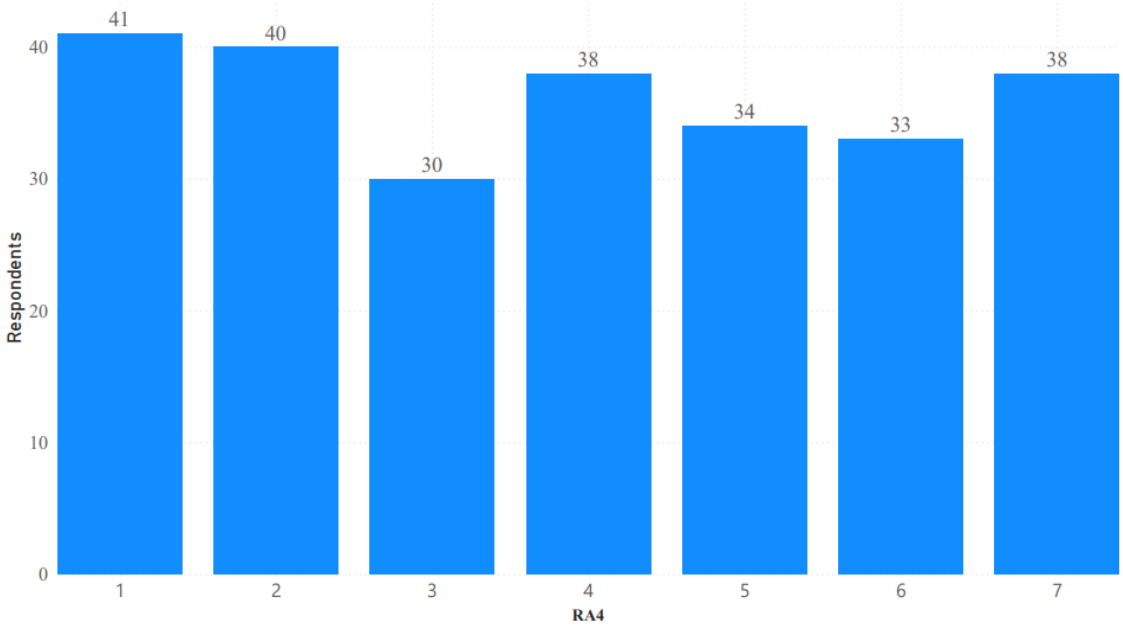
RA2 - Stability of my investments is more important to me than the chance of a quick profit



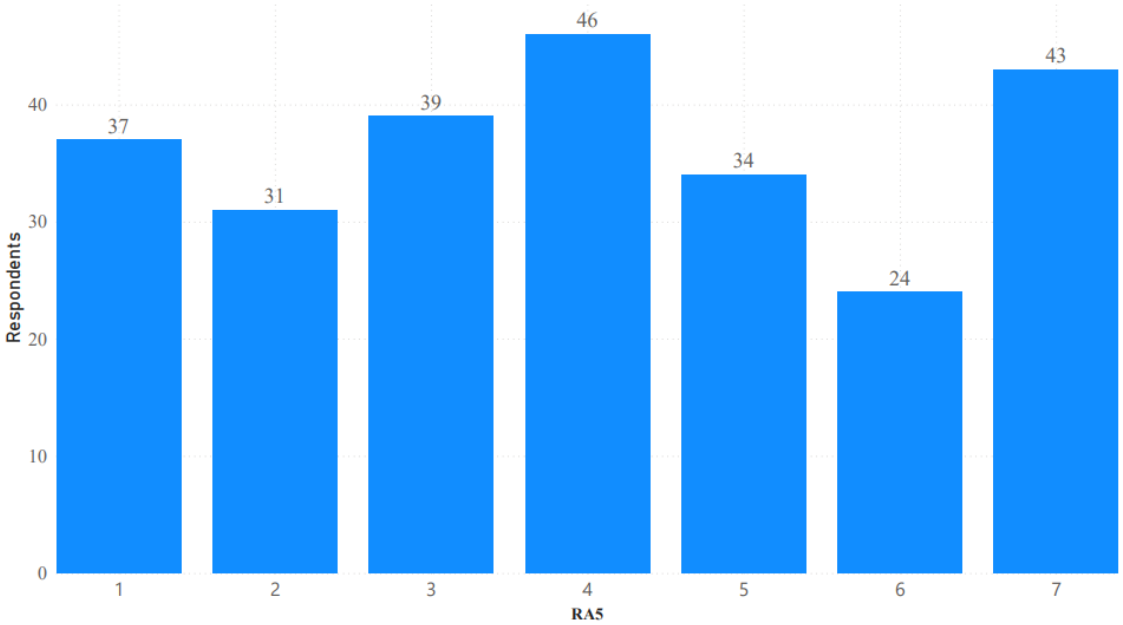
RA3 - Continuity of my investments is more important to me than the chance of a quick profit



RA4 - Even small financial losses make me nervous.



RA5 - I am reluctant to take risks regarding financial matters



6. SEM Analysis - Reliability and Validity tests

	Loading	Cronbach's Alpha	Composity Reliability	AVE
INT1	0.899	0.911	0.938	0.790
INT2	0.924			
INT3	0.863			
INT4	0.868			
ATB1	0.817	0.823	0.876	0.588
ATB2	0.655			
ATB3	0.807			
ATB4	0.853			
ATB5	0.684			
SN1	0.821	0.813	0.865	0.565
SN2	0.581			
SN3	0.837			
SN4	0.711			
SN5	0.780			
PBC1	0.896	0.716	0.806	0.523
PBC2	0.832			
PBC4	0.537			
PBC5	0.556			
RA1	0.792	0.768	0.854	0.598
RA2	0.595			
RA4	0.882			
RA5	0.795			
SP1	1.000	1.000	1.000	1.000
FPE	1.000	1.000	1.000	1.000
SEX	1.000	1.000	1.000	1.000

Appendix 6.1 . Factor Loadings, Cronbach's Alpha, Composity Reliability and AVE, n = 254. Extracted from SmartPLS 4.

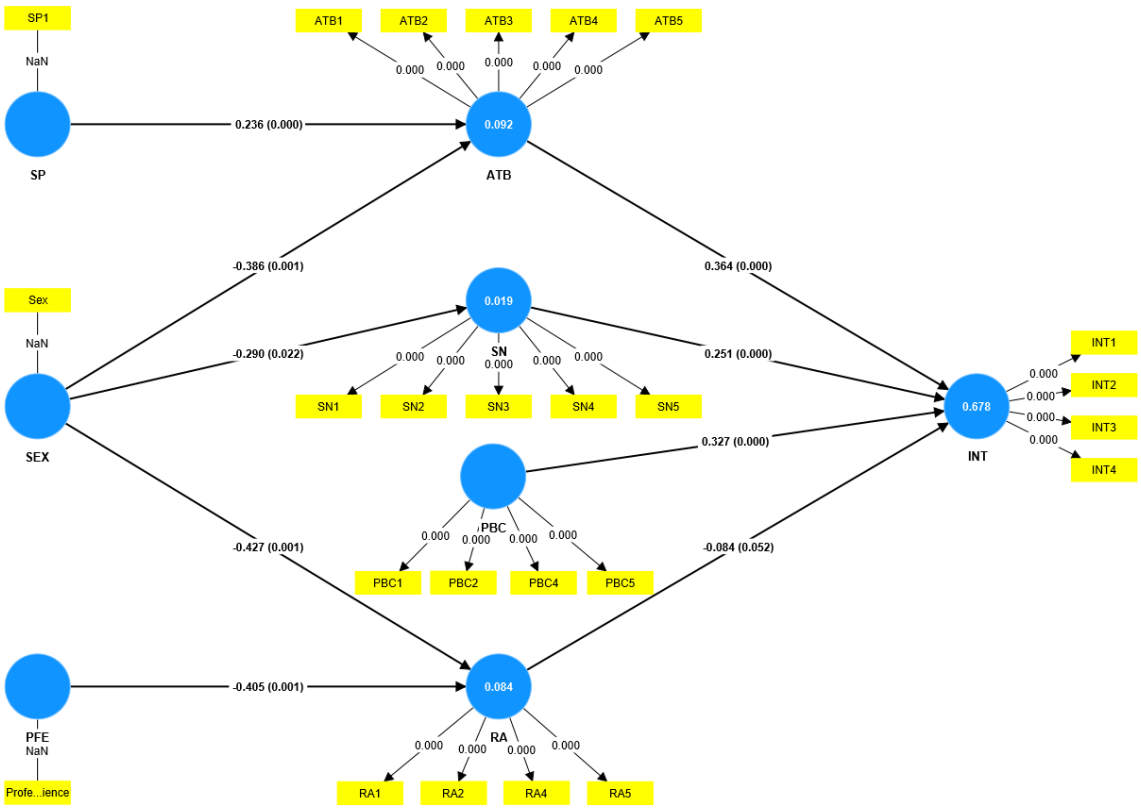
HTMT								
	ATB	INT	PBC	FMP	RA	SN	SP1	SEX
ATB								
INT	0.813							
PBC	0.669	0.773						
FMP	0.099	0.068	0.124					
RA	0.194	0.051	0.246	0.234				
SN	0.721	0.739	0.705	0.043	0.195			
SP1	0.271	0.300	0.368	0.006	0.118	0.196		
SEX	0.218	0.093	0.155	0.016	0.233	0.156	0.024	

Appendix 6.2. HTMT - Heterotrait-Monotrait Ratio, n = 254. Extracted from SmartPLS 4.

	VIF
ATB1	1.895
ATB2	1.912
ATB3	2.476
ATB4	2.393
ATB5	1.521
INT1	3.223
INT2	3.873
INT3	2.390
INT4	2.422
PBC1	1.713
PBC2	1.604
PBC4	1.280
PBC5	1.308
SEX	1.000
RA1	1.929
RA2	1.181
RA4	2.529
RA5	1.697
SN1	2.277
SN2	1.540
SN3	2.489
SN4	1.826
SN5	1.414
SP1	1.000
FMP	1.000

Appendix 6.3. Collinearity Statistics VIF, n = 254. Extracted from SmartPLS 4.

7. SEM Analysis - Structural Model Analysis



Appendix 7.1. Partial Least Squares of structural equation modeling, n = 254.

Constructed on SmartPLS 4

	R-square	R-square adjusted
INT	0.678	0.673

Appendix 7.2. Model R-square, n = 254. Extracted from SmartPLS 4.

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f-square
ATB -> INT	0.364	0.364	0.368	0.065	5.608	0.000	0.205

SN -> INT	0.251	0.251	0.249	0.054	4.638	0.000	0.088
PBC -> INT	0.327	0.327	0.326	0.055	5.908	0.000	0.151
RA -> INT	-0.084	-0.084	-0.086	0.044	1.940	0.052	0.020

Appendix 7.3 Partial Least Squares of structural equation modeling, Direct effect results, n = 254. Extracted from SmartPLS 4

	Path coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
SP -> INT	0.044	0.044	0.046	0.042	1.038	0.299
SEX -> INT	-0.177	-0.177	-0.177	0.073	2.435	0.015
PFE -> INT	0.034	0.034	0.036	0.022	1.540	0.124

Appendix 7.4 Partial Least Squares of structural equation modeling, Indirect effect results, n = 254. Extracted from SmartPLS 4

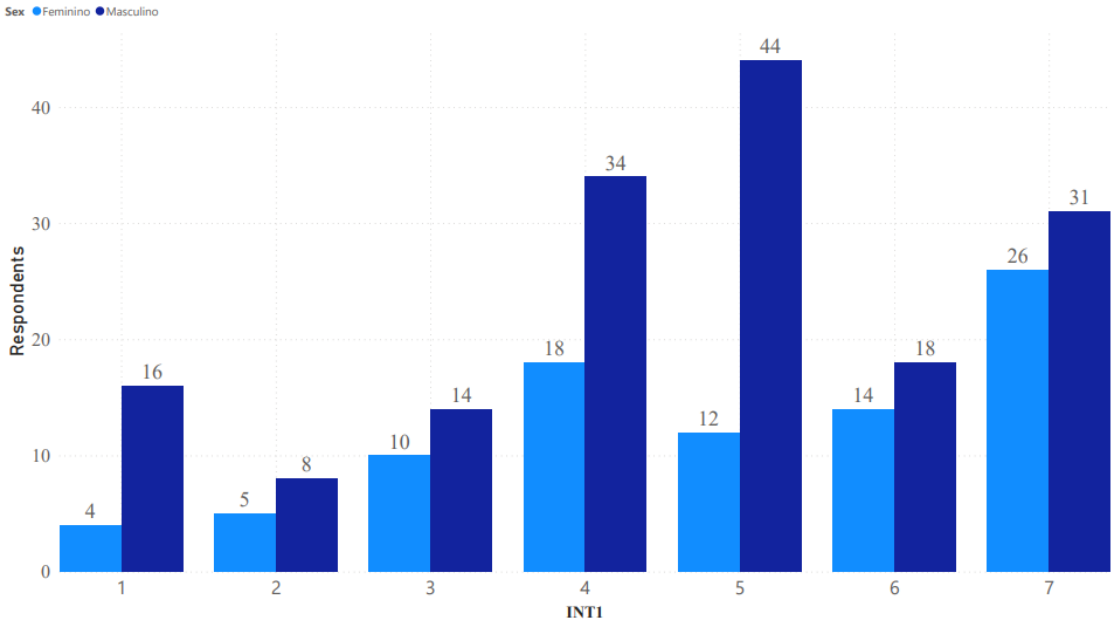
8. Descriptive data by Sex

Demographics	Outcome	Total	%	Female	%	Male	%
Academic Background	Elementary school incomplete	0	0,0%	0	0,0%	0	0,0%
	Elementary school complete	2	0,8%	2	2,2%	0	0,0%
	High School complete	8	3,1%	6	6,7%	2	1,2%
	Bachelor complete	83	32,7%	29	32,6%	54	32,7%
	Post graduation complete	161	63,4%	52	58,4%	109	66,1%
Demographics	Outcome	Total	%	Female	%	Male	%
Occupation	Not working or studying	1	0,4%	1	1,1%	0	0,0%
	Student	0	0,0%	0	0,0%	0	0,0%
	Employed	120	47,2%	44	49,4%	76	46,1%
	Entrepreneur	88	34,6%	22	24,7%	66	40,0%
	Retired	45	17,7%	22	24,7%	23	13,9%
Demographics	Outcome	Total	%	Female	%	Male	%
Financial market professional	Yes	114	44,9%	39	43,8%	75	45,5%
	No	140	55,1%	50	56,2%	90	54,5%
Demographics	Outcome	Total	%	Female	%	Male	%
Investing frequency	I have never invested		0,0%	0	0,0%	0	0,0%
	I have invested a few times	46	18,1%	22	24,7%	24	14,5%
	I invest occasionally	75	29,5%	31	34,8%	44	26,7%
	I invest frequently	67	26,4%	20	22,5%	47	28,5%
	I am continuously investing	66	26,0%	16	18,0%	50	30,3%
Demographics	Outcome	Total	%	Female	%	Male	%
Financial Objectives	I do not invest	1	0,4%	1	1,1%	0	0,0%
	I want to save money for emergencies	29	11,4%	15	16,9%	14	8,5%
	I want to save money to travel and buy goods	15	5,9%	8	9,0%	7	4,2%
	I want to buy a house	8	3,1%	4	4,5%	4	2,4%
	I want to save for my retirement	67	26,4%	15	16,9%	52	31,5%
	I want to optmize my savings	99	39,0%	34	38,2%	65	39,4%
	Protect my resources from inflation	24	9,4%	9	10,1%	15	9,1%
	Other	11	4,3%	3	3,4%	8	4,8%
Demographics	Outcome	Total	%	Female	%	Male	%
Income	No income	1	0,4%	1	1,1%	0	0,0%
	up to R$2.499,00	6	2,4%	5	5,6%	1	0,6%
	From R$2.500,00 to R$4.999,00	25	9,8%	14	15,7%	11	6,7%
	From R$5.000,00 to R$7.499,00	35	13,8%	20	22,5%	15	9,1%
	From R$ 7.500,00 to R$ 9.999,00	30	11,8%	8	9,0%	22	13,3%
	From R$10.000,00 to R$12.499,00	29	11,4%	12	13,5%	17	10,3%
	R$ 12.500,00 or more	109	42,9%	20	22,5%	89	53,9%
	I prefer to not say	20	7,9%	9	10,1%	11	6,7%

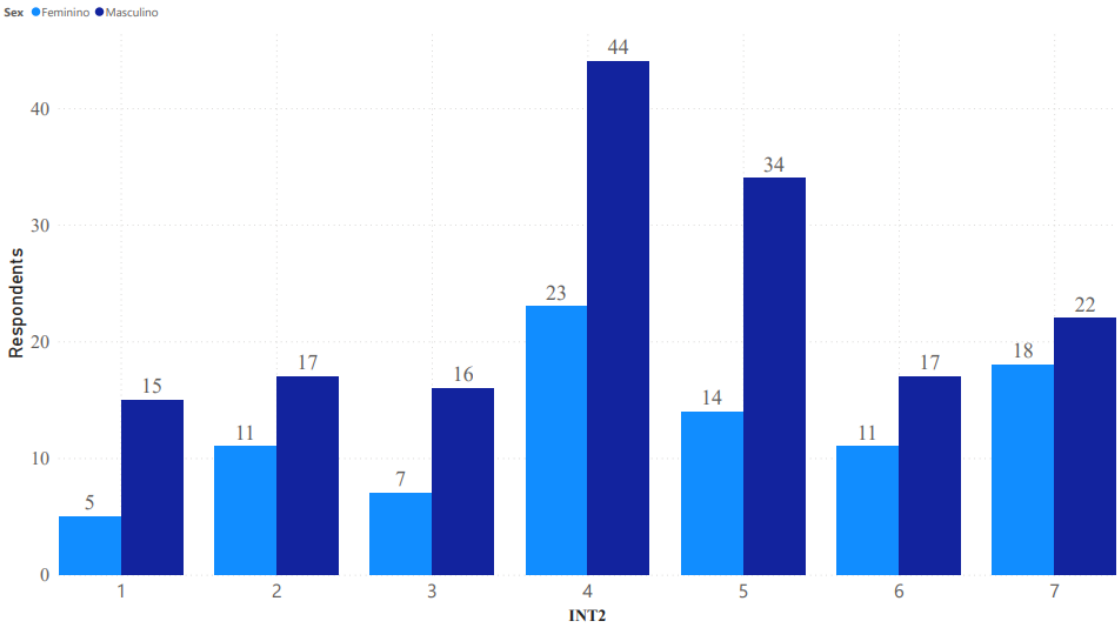
Appendix 8.1. Descriptive data by Sex, n = 254. Extracted from Google Survey Tool.

9. Questionnaire results by Sex - Graphics

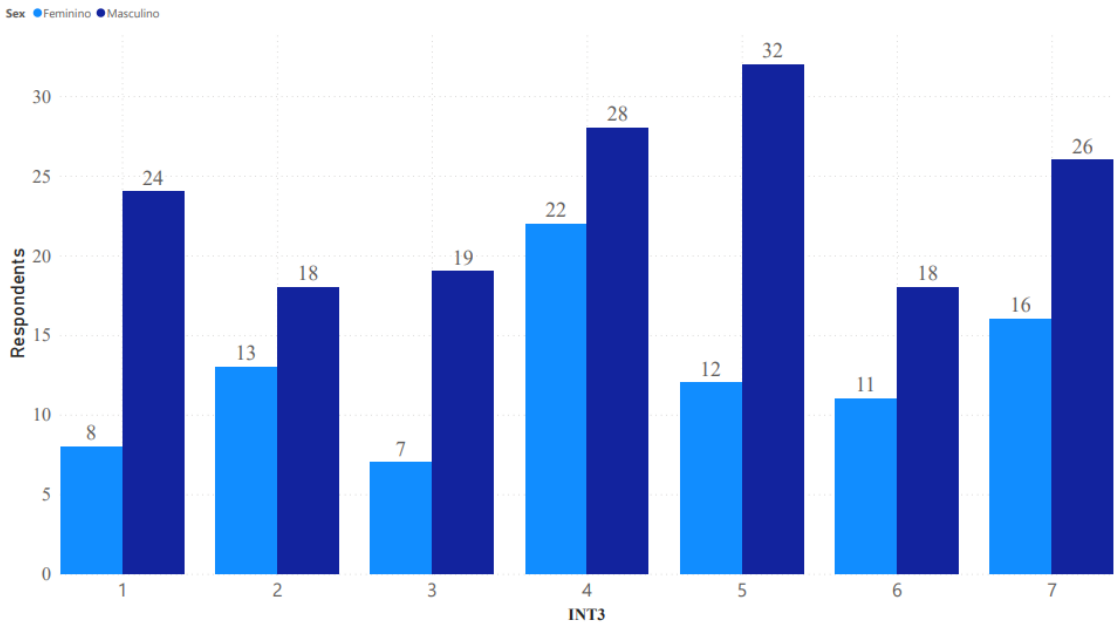
INT 1 - I intend to invest in Impact Investment funds.



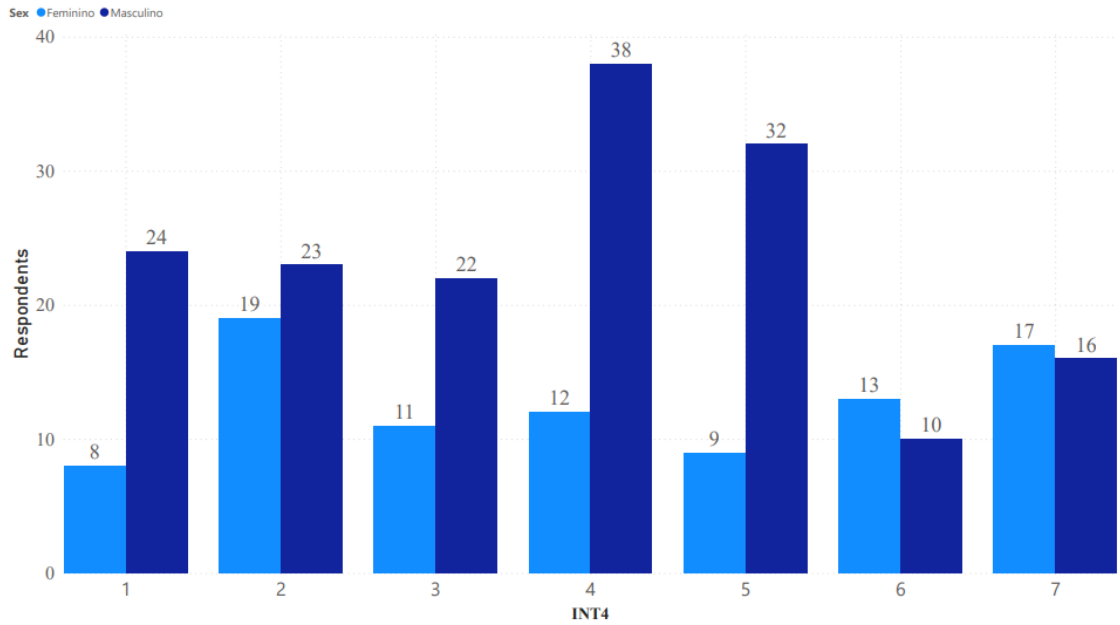
INT2 - I want to invest in Impact Investment funds



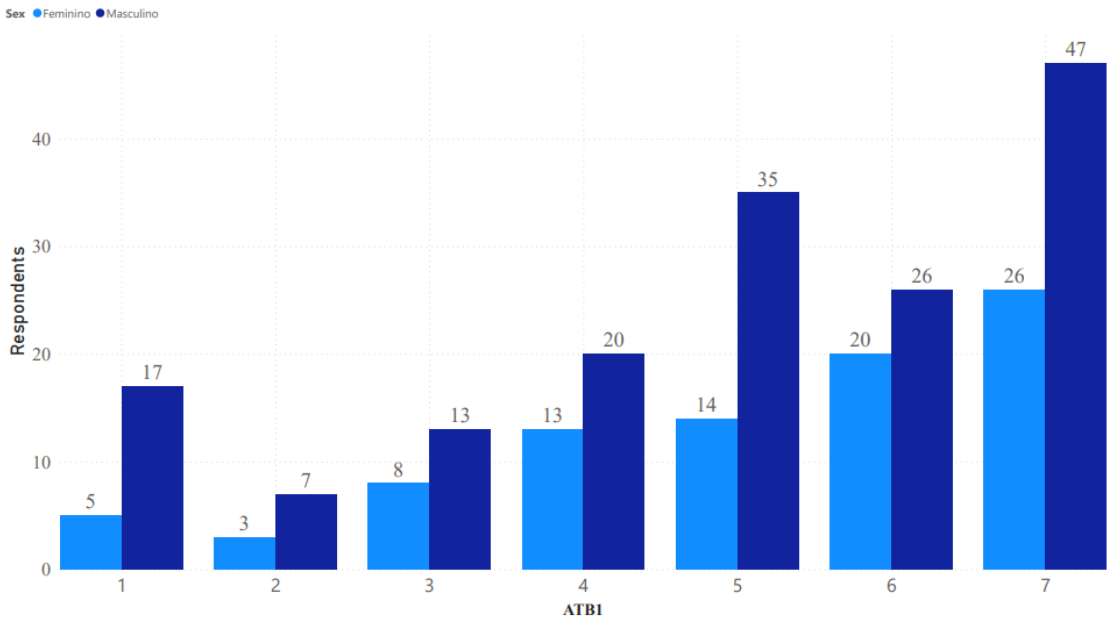
INT3 - I would invest in impact investments whenever I am given the opportunity.



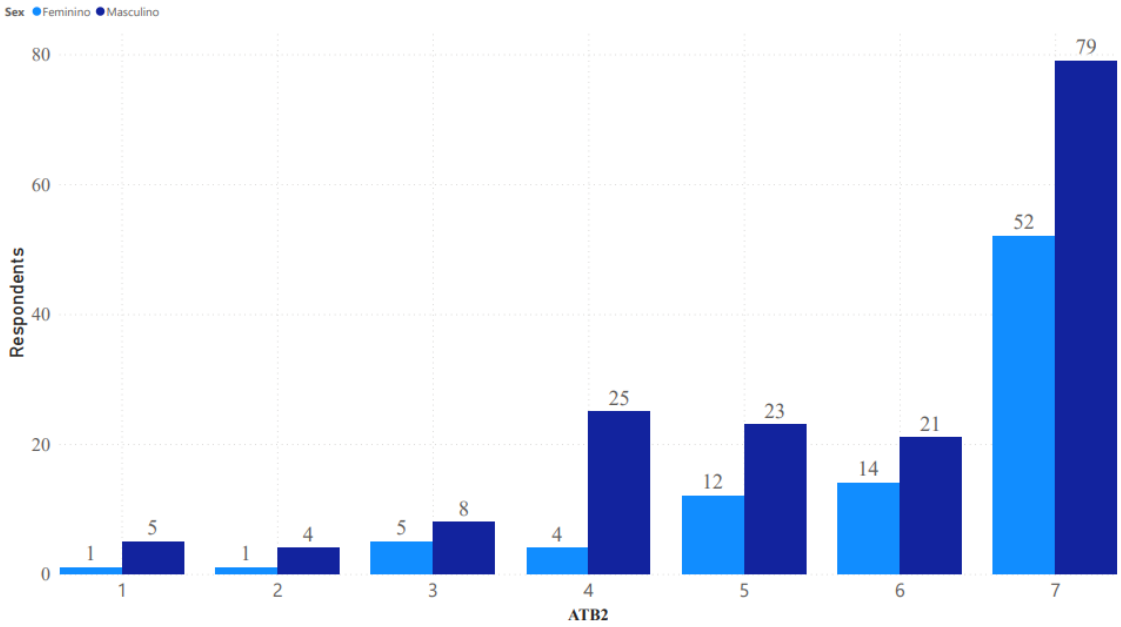
INT4 - I will search impact investment funds to invest.



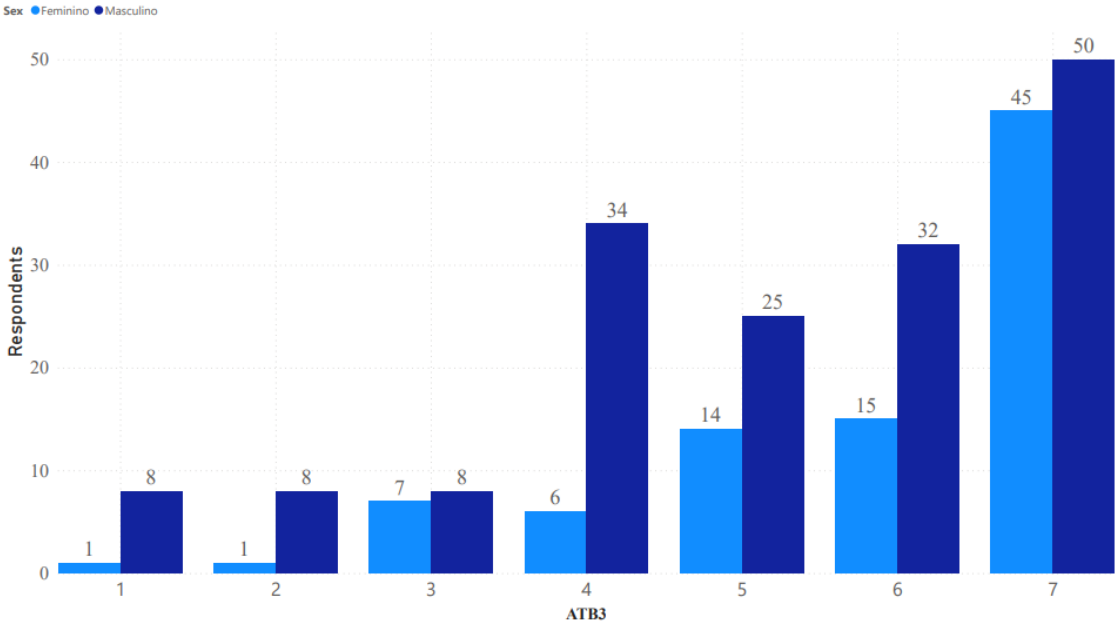
ATB1 - I think Impact Investing is a promising solution to solve global social and environmental challenges.



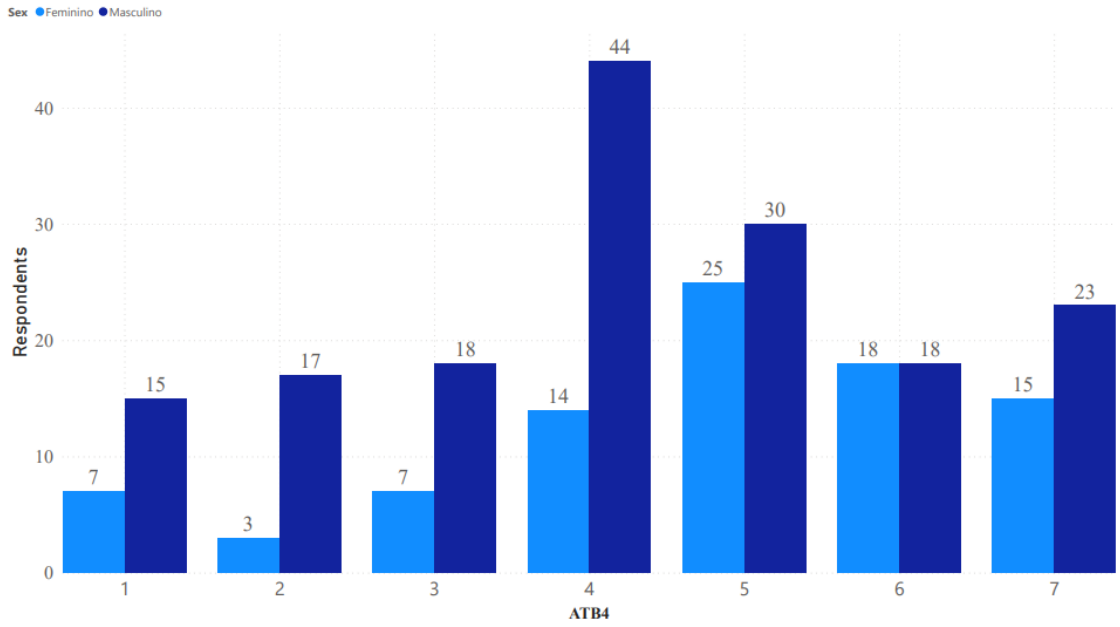
ATB2 - I think investments should take into consideration the social and environmental damage they cause



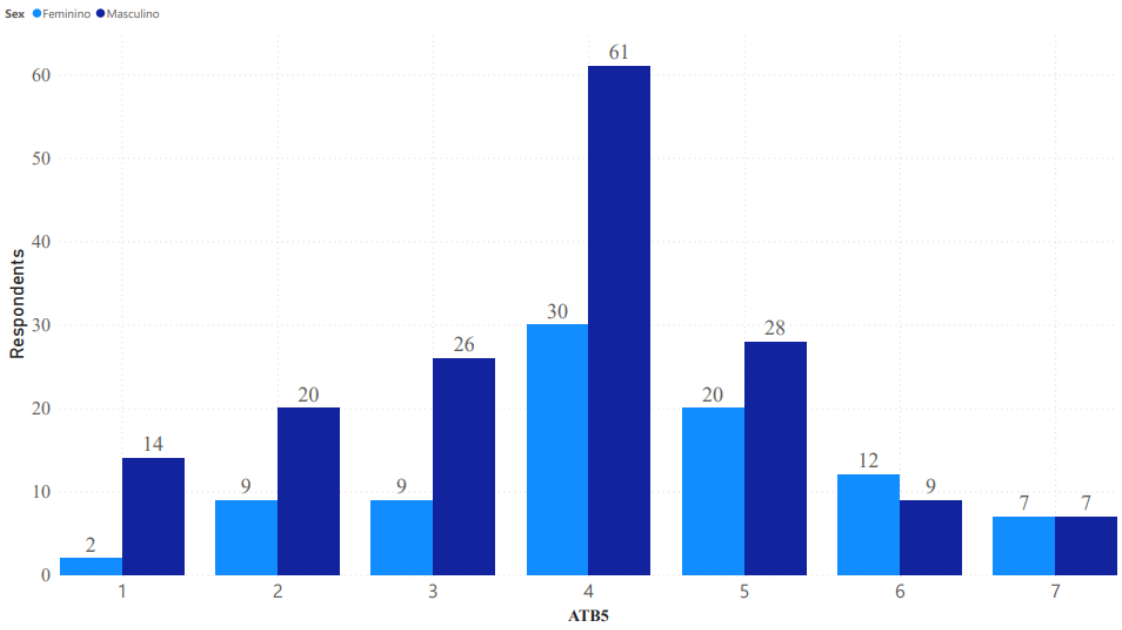
ATB3 - I think investments should promote social and environmental solutions.



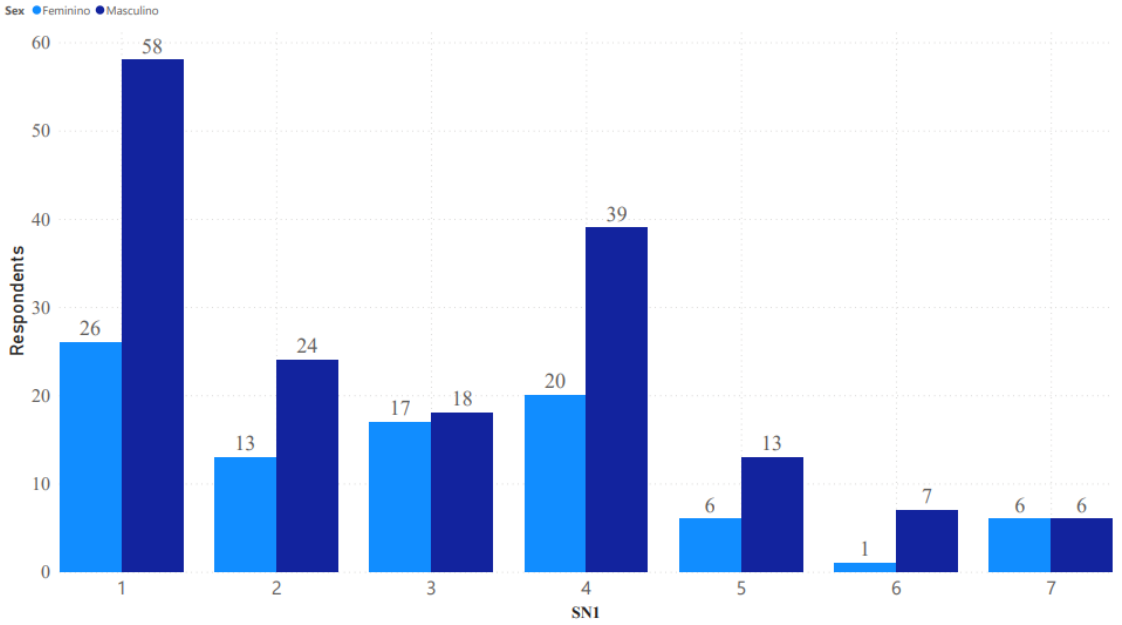
ATB4 - I am convinced that impact investments promote solutions to social and environmental challenges in an effective way



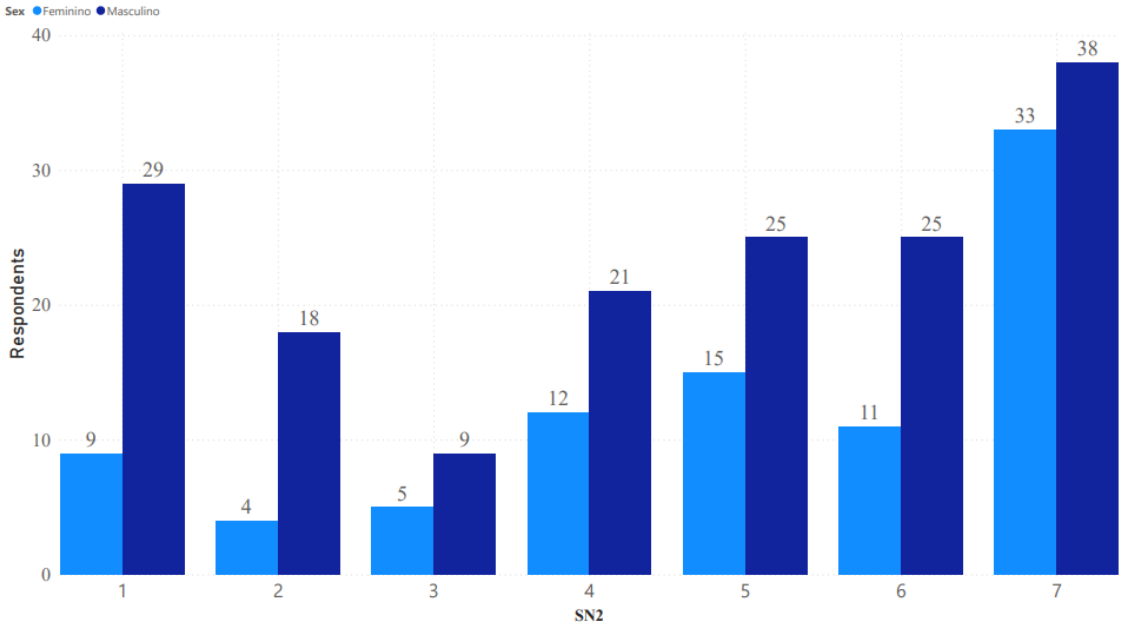
ATB5 - I think impact investments yield high financial returns.



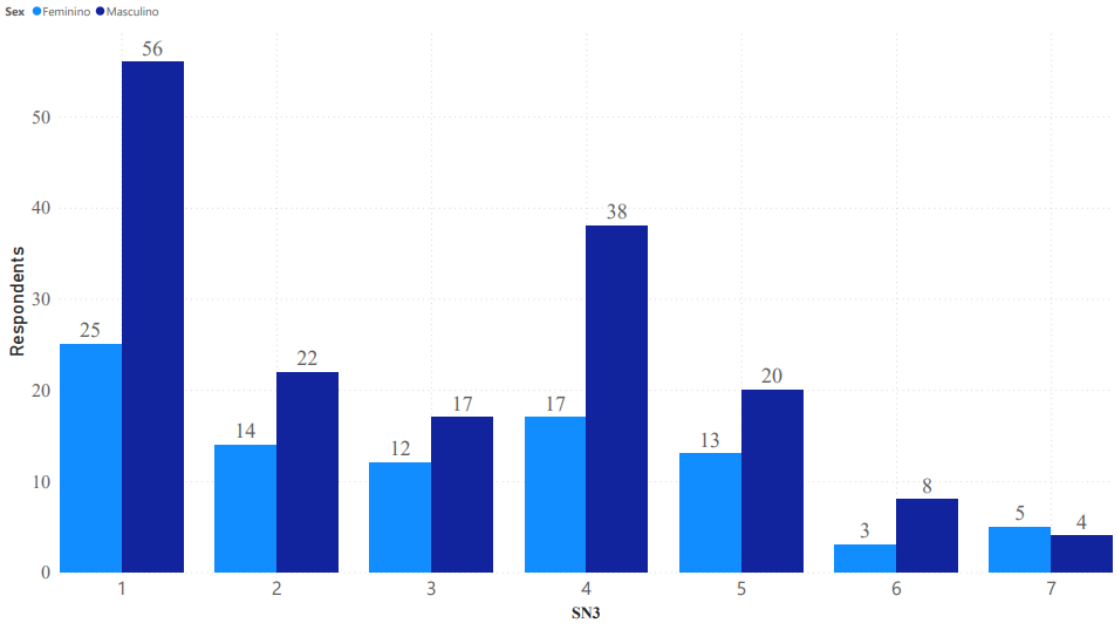
SN1 - My family members expect me to invest in impact investing



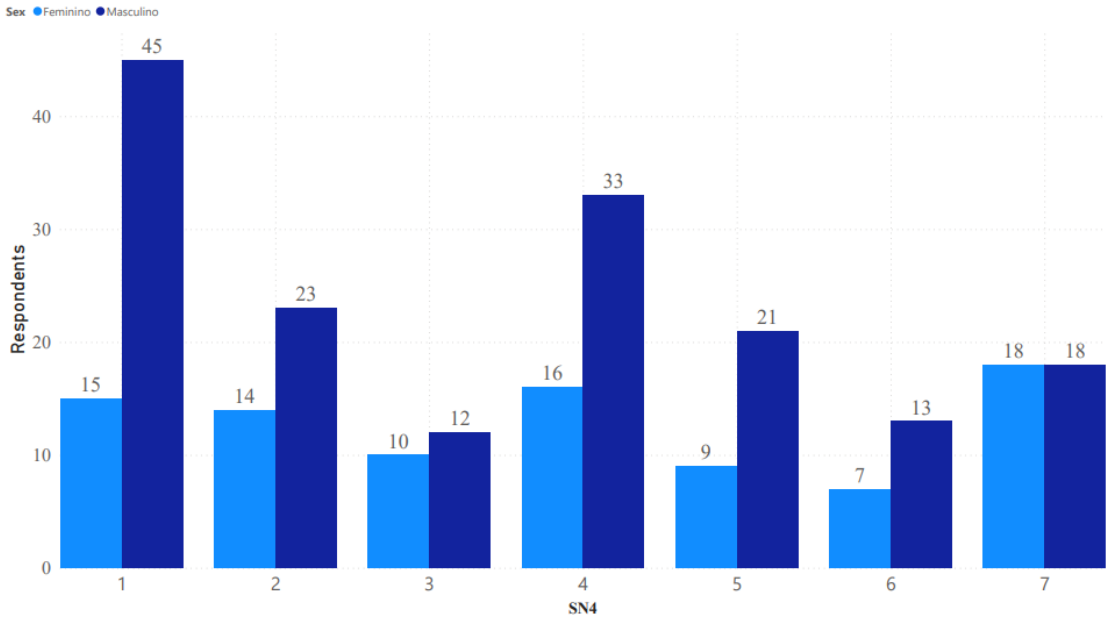
SN2 - My family members would be aware of my investment decision.



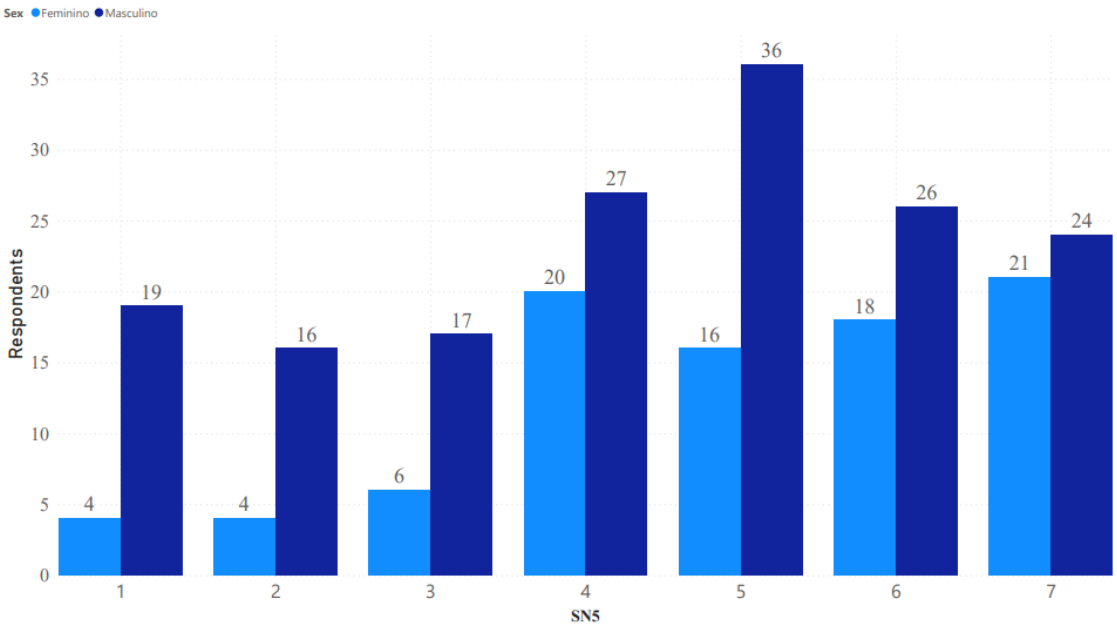
SN3 - People with whom I closely relate expect me to invest in impact investing



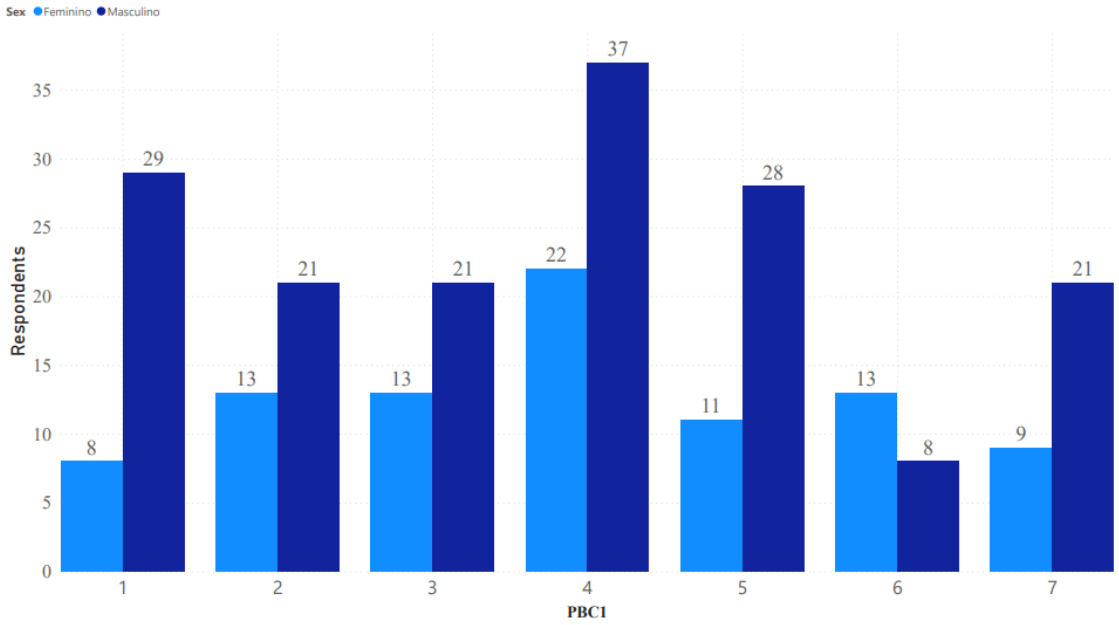
SN4 - People with whom I closely relate would be aware of my investment decision



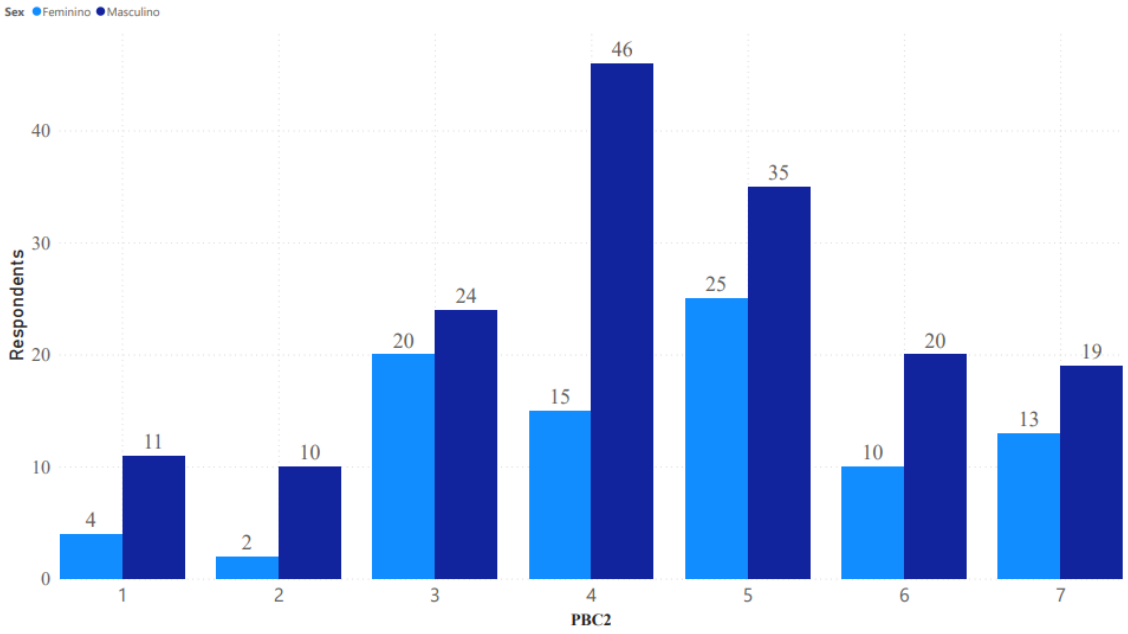
SN5 - There is a strong need to do something for the society and the environment, which is one of the reasons I should do impact investing



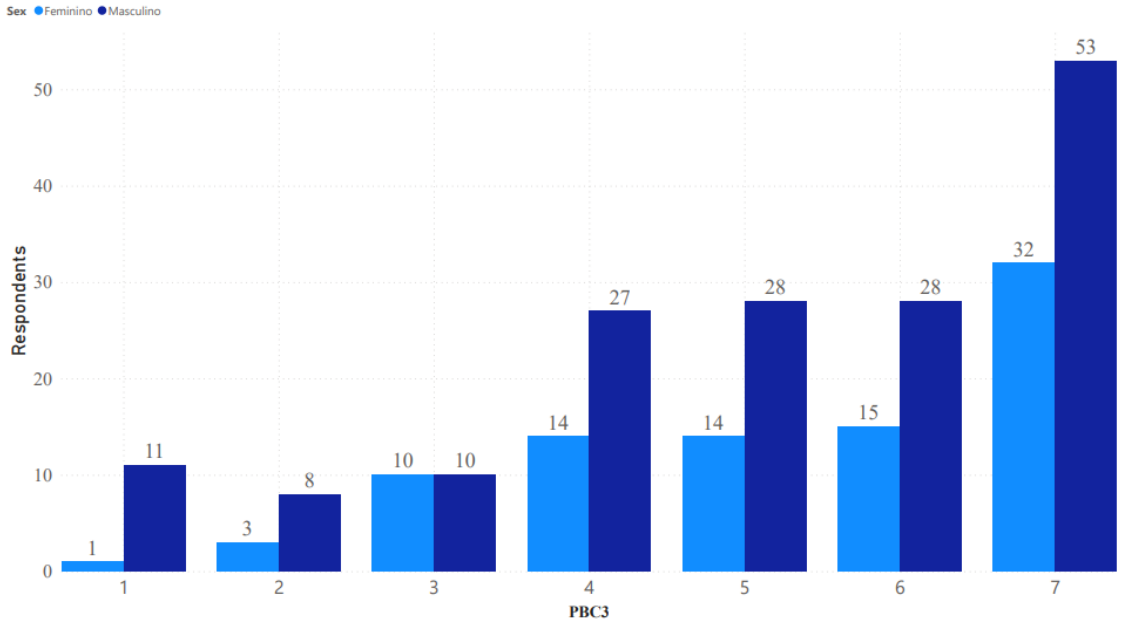
PBC1 - I feel confident about being able to engage in impact investments



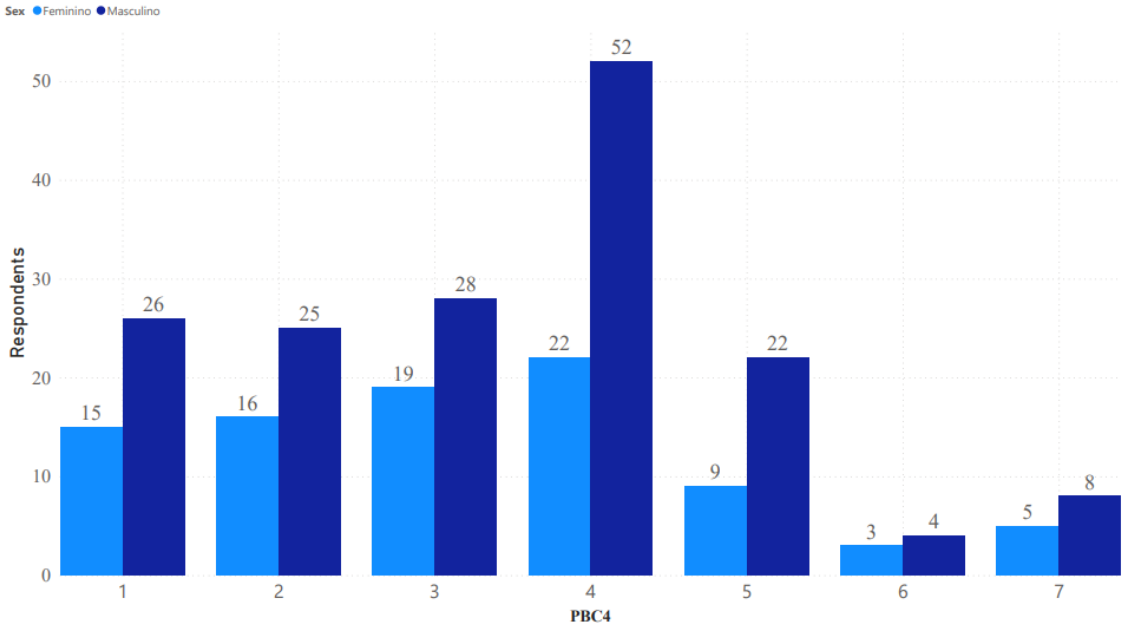
PBC2 - I am able to overcome the obstacles or problems which could prevent me from engaging in impact investments.



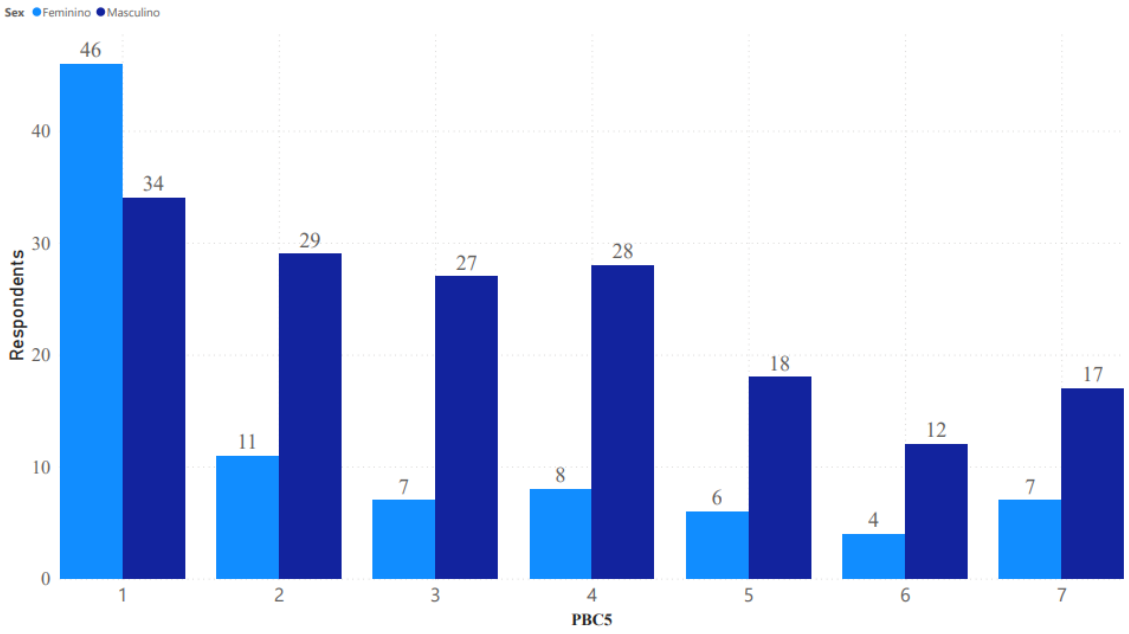
PBC3 - Engaging in impact investments is within my own control.



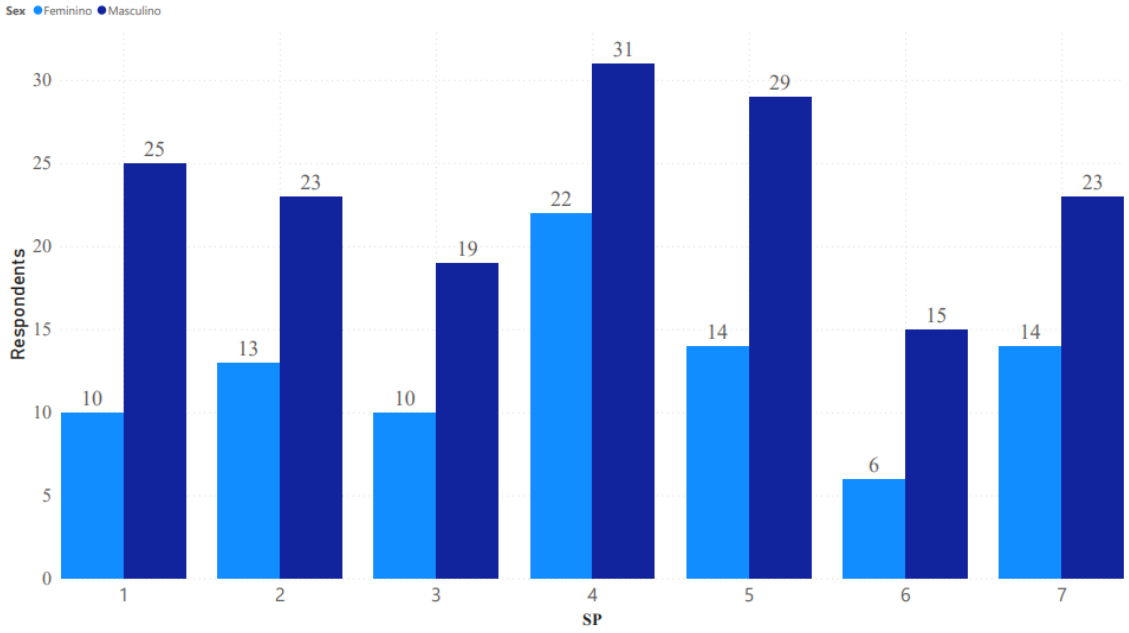
PBC4 - Engaging in impact investments is easy.



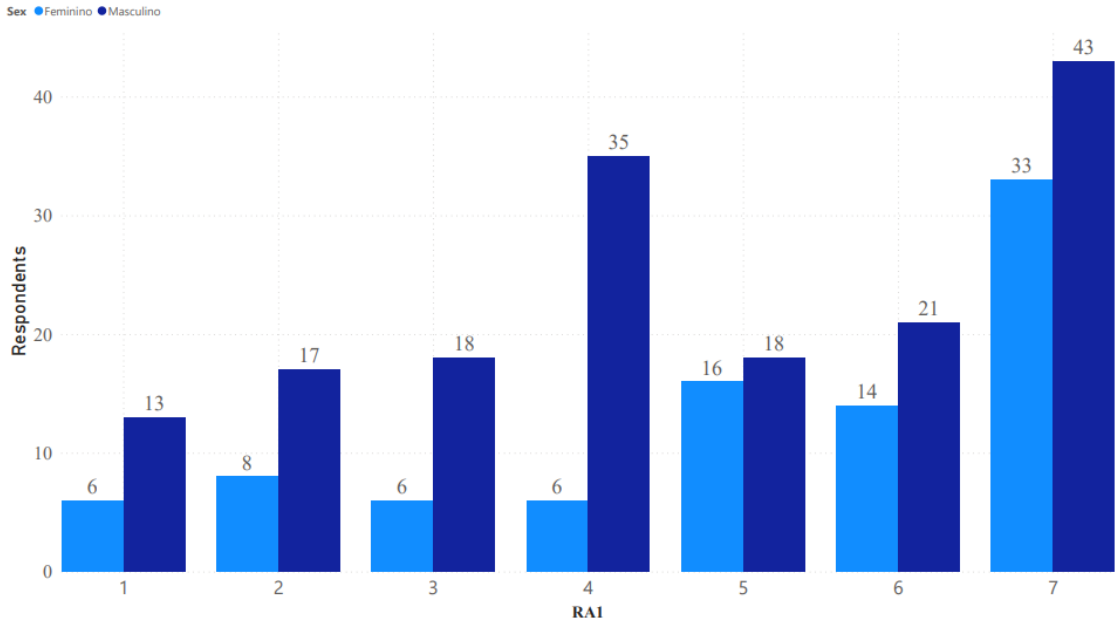
PBC5 - I think I have sufficient knowledge which enables me to engage in impact investments



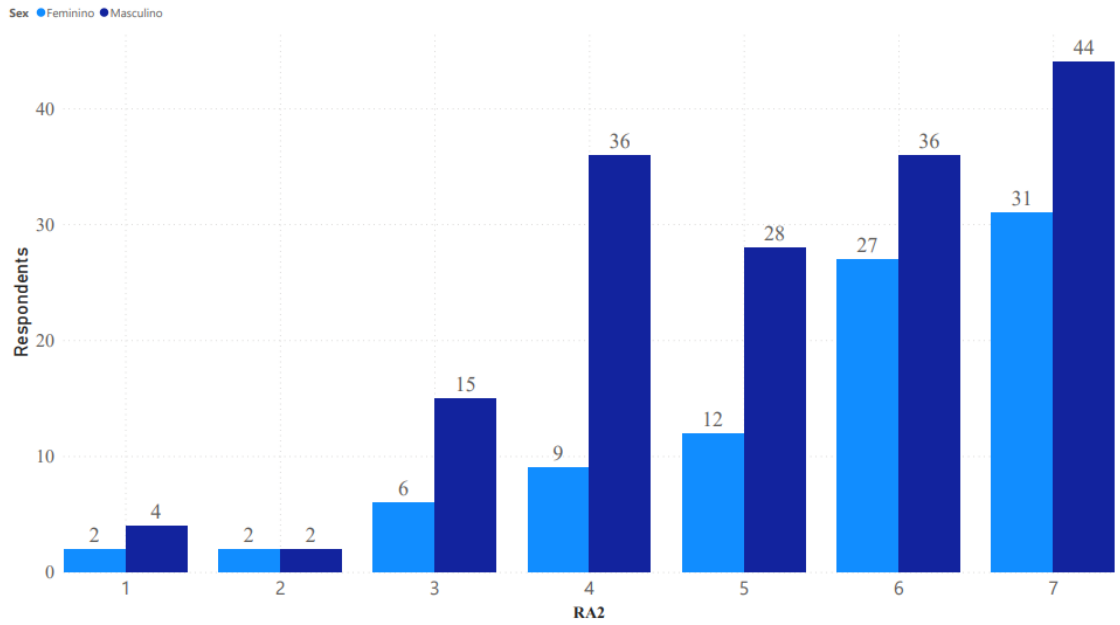
SP - How willing are you to give money to good causes without expecting anything in return?



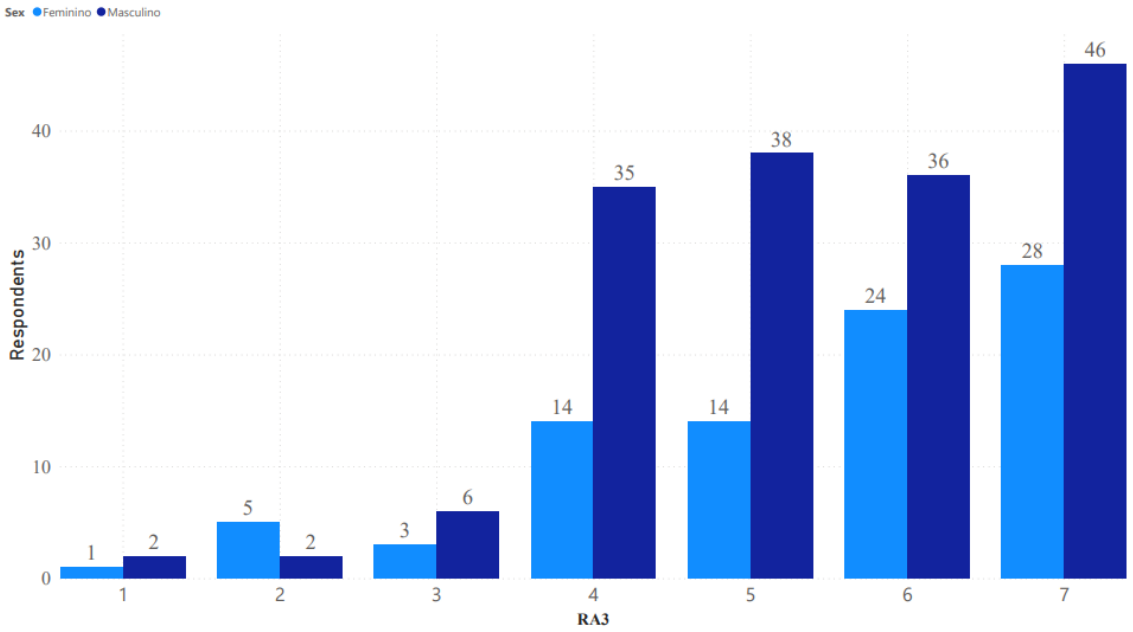
RA1 - The risk of losing money on the financial market causes mental stress.



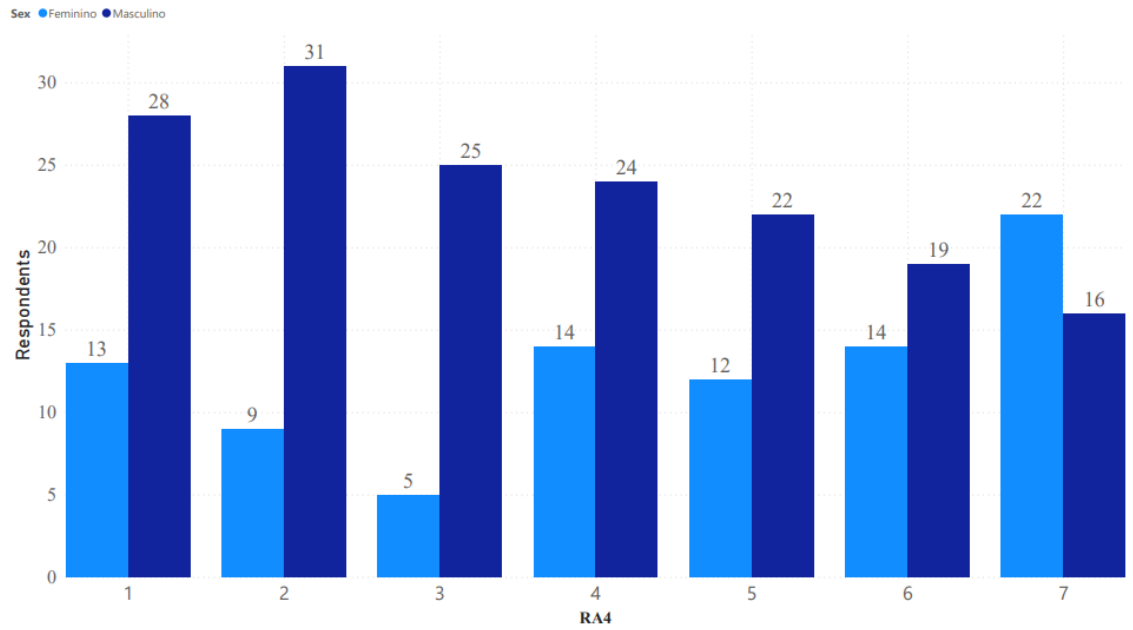
RA2 - Stability of my investments is more important to me than the chance of a quick profit



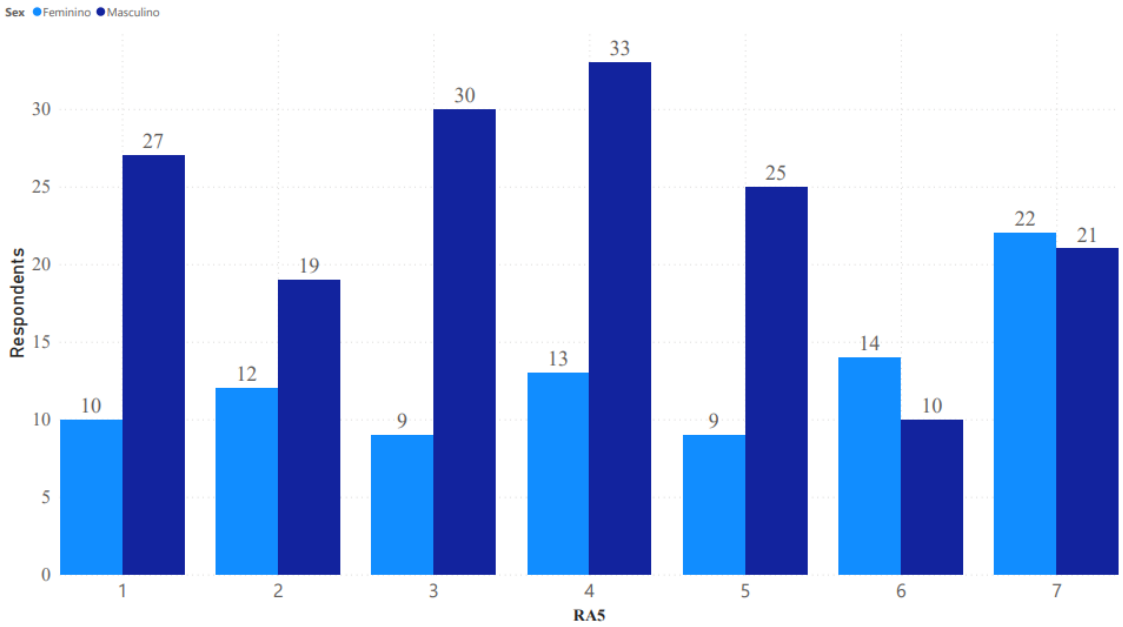
RA3 - Continuity of my investments is more important to me than the chance of a quick profit



RA4 - Even small financial losses make me nervous.



RA5 - I am reluctant to take risks regarding financial matters



10. Descriptive Data by type of profession

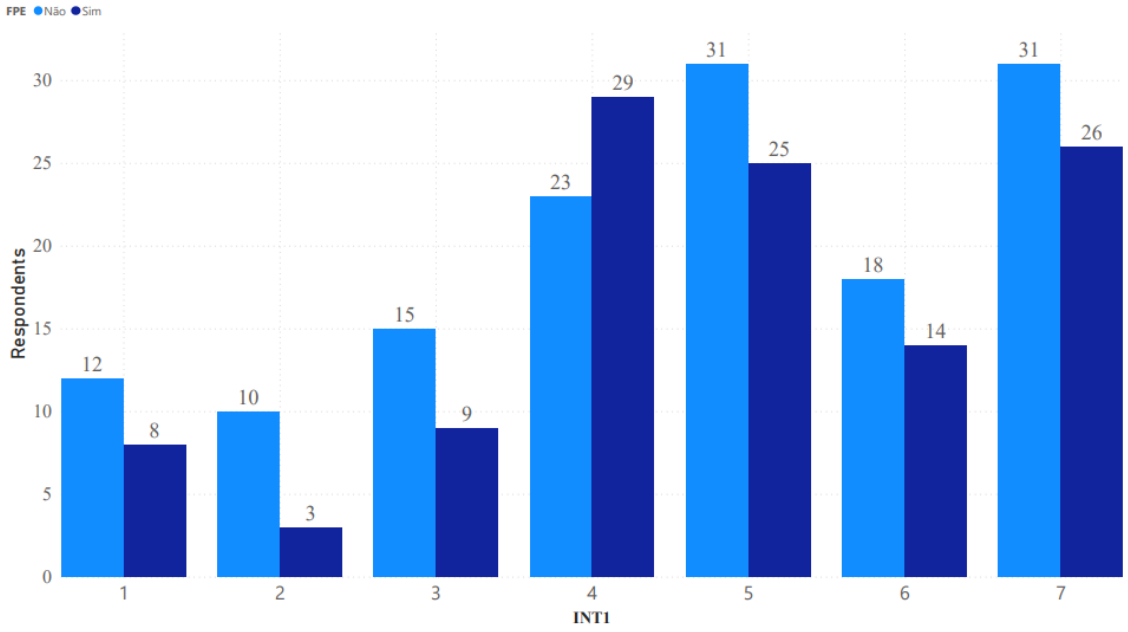
Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Academic Background	Elementary school incomplete	0	0,0%	0	0,0%	0	0,0%
	Elementary school complete	2	0,8%	1	0,9%	1	0,7%
	High School complete	8	3,1%	5	4,4%	3	2,1%
	Bachelor complete	83	32,7%	40	35,1%	43	30,7%
	Post graduation complete	161	63,4%	68	59,6%	93	66,4%
Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Occupation	Not working or studying	1	0,4%	0	0,0%	1	0,7%
	Student	0	0,0%	0	0,0%	0	0,0%
	Employed	120	47,2%	64	56,1%	56	40,0%
	Entrepreneur	88	34,6%	32	28,1%	56	40,0%
	Retired	45	17,7%	18	15,8%	27	19,3%
Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Investing frequency	I have never invested		0,0%	0	0,0%	0	0,0%
	I have invested a few times	46	18,1%	9	7,9%	37	26,4%
	I invest occasionally	75	29,5%	28	24,6%	47	33,6%
	I invest frequently	67	26,4%	39	34,2%	28	20,0%
	I am continuously investing	66	26,0%	38	33,3%	28	20,0%
Demographics	Outcome	Total	%	Financial Market Professional	%	Non Financial Market Professional	%
Financial Objectives	I do not invest	1	0,4%	0	0,0%	1	0,7%
	I want to save money for emergencies	29	11,4%	11	9,6%	18	12,9%
	I want to save money to travel and buy goods	15	5,9%	6	5,3%	9	6,4%
	I want to buy a house	8	3,1%	4	3,5%	4	2,9%
	I want to save for my retirement	68	26,8%	29	25,4%	38	27,1%
	I want to optmize my savings	98	38,6%	48	42,1%	51	36,4%
	Protect my resources from inflation	24	9,4%	11	9,6%	13	9,3%
	Other	11	4,3%	5	4,4%	6	4,3%

Appendix 10.1. Descriptive data by professional financial experience, n = 254.

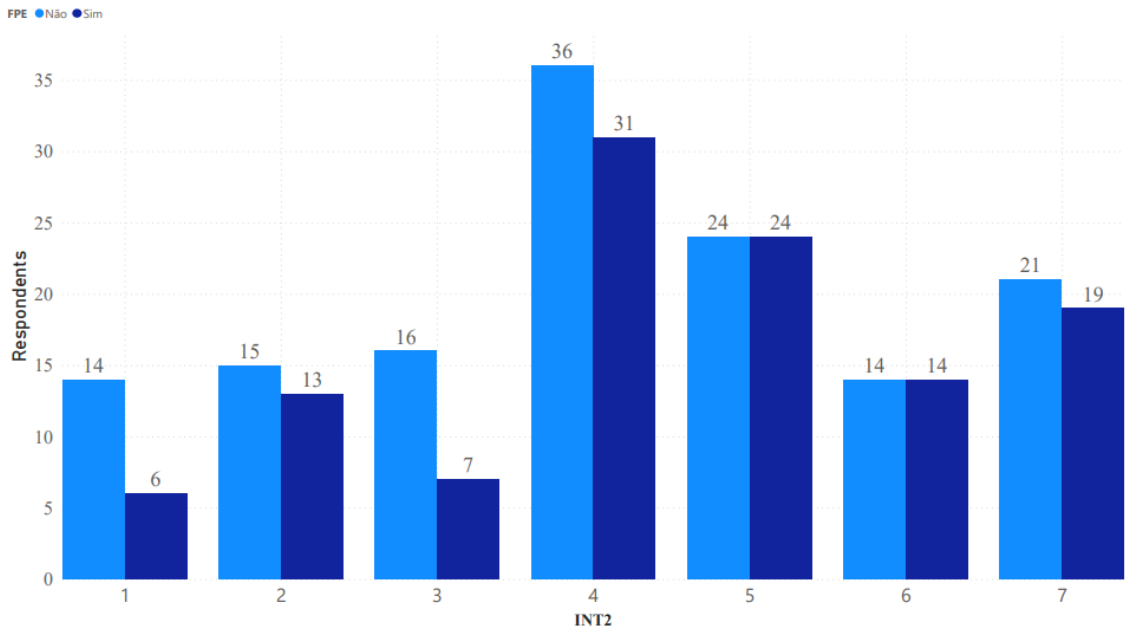
Extracted from Google Survey Tool.

11. Questionnaire results by type of profession - Graphics

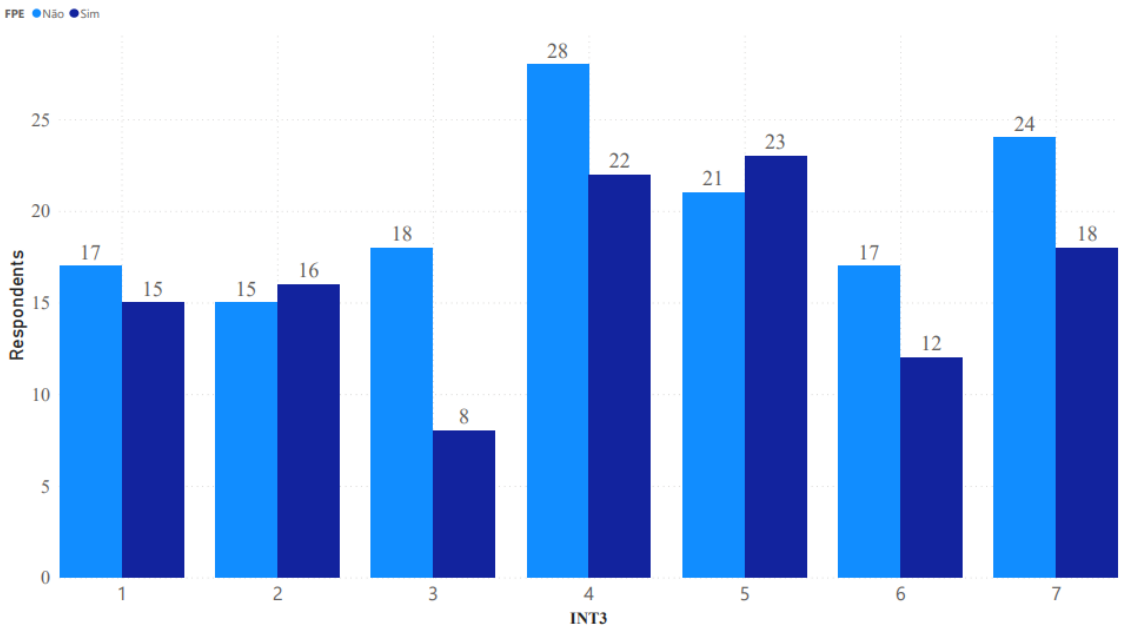
INT 1 - I intend to invest in Impact Investment funds.



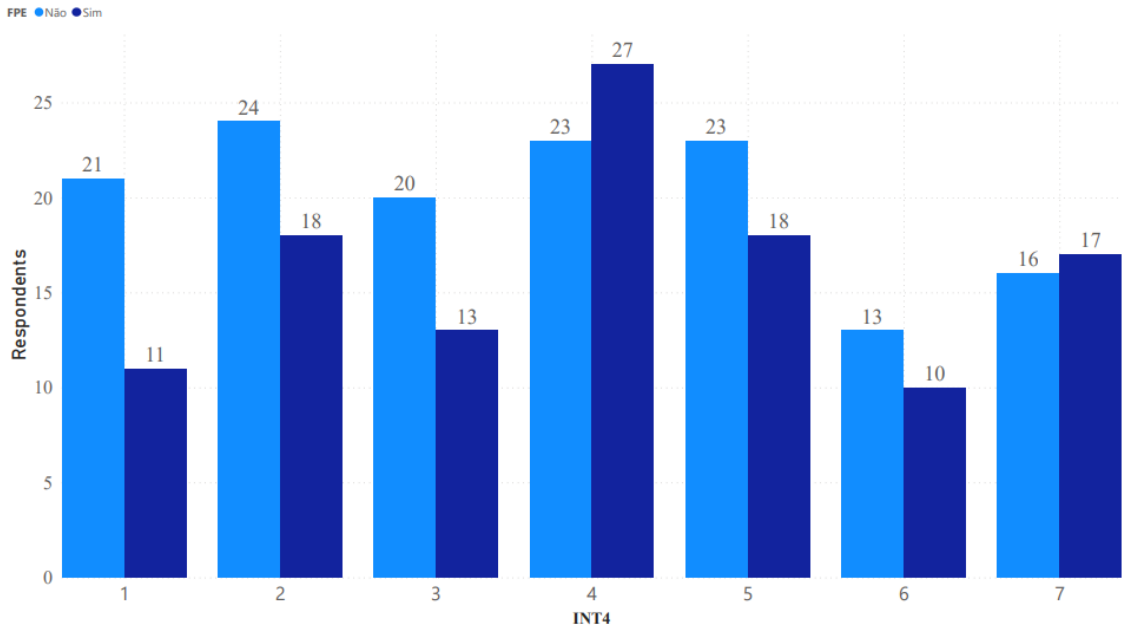
INT2 - I want to invest in Impact Investment funds



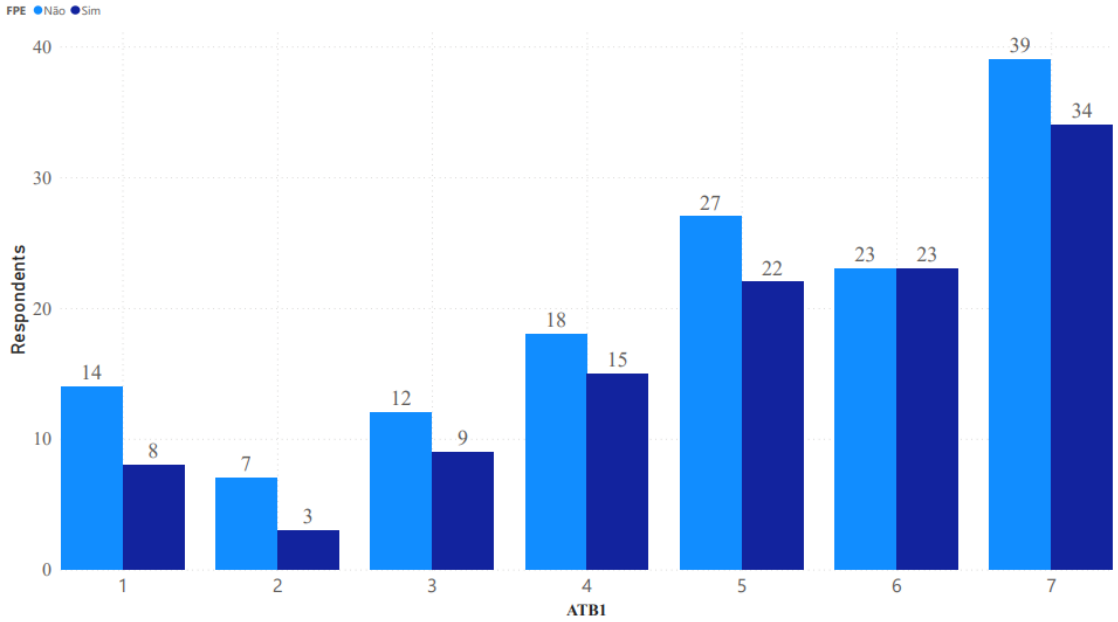
INT3 - I would invest in impact investments whenever I am given the opportunity.



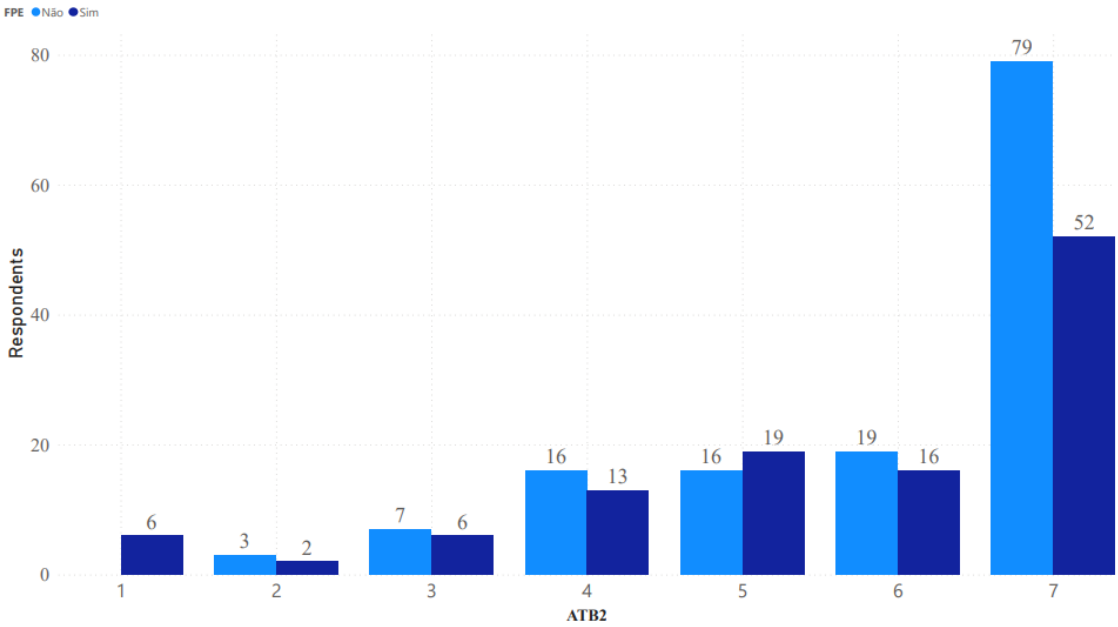
INT4 - I will search impact investment funds to invest.



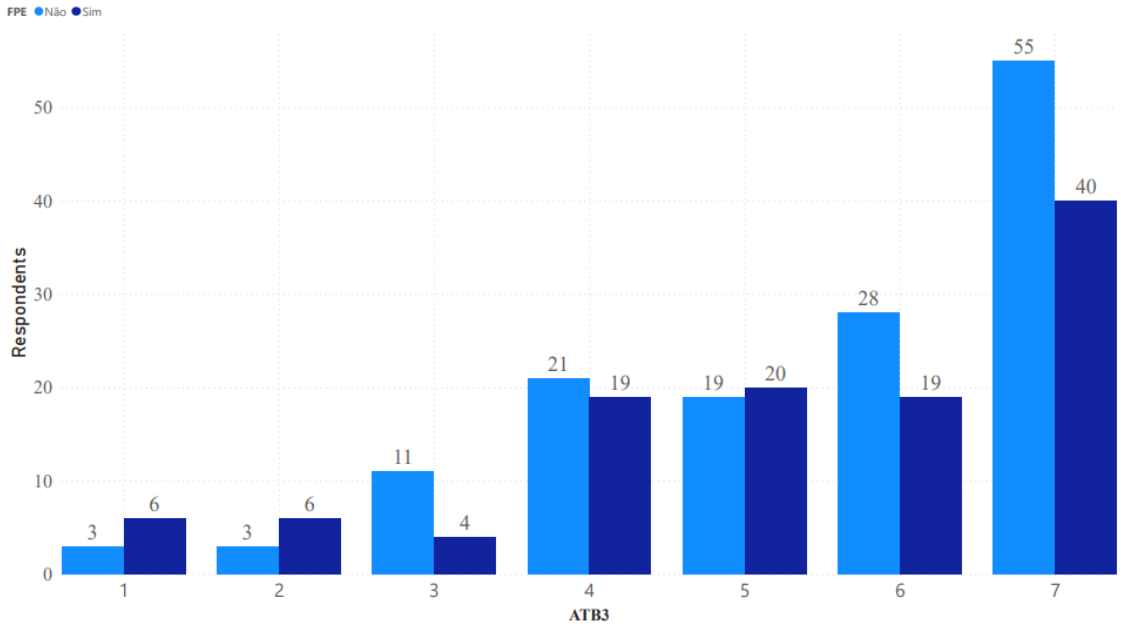
ATB1 - I think Impact Investing is a promising solution to solve global social and environmental challenges.



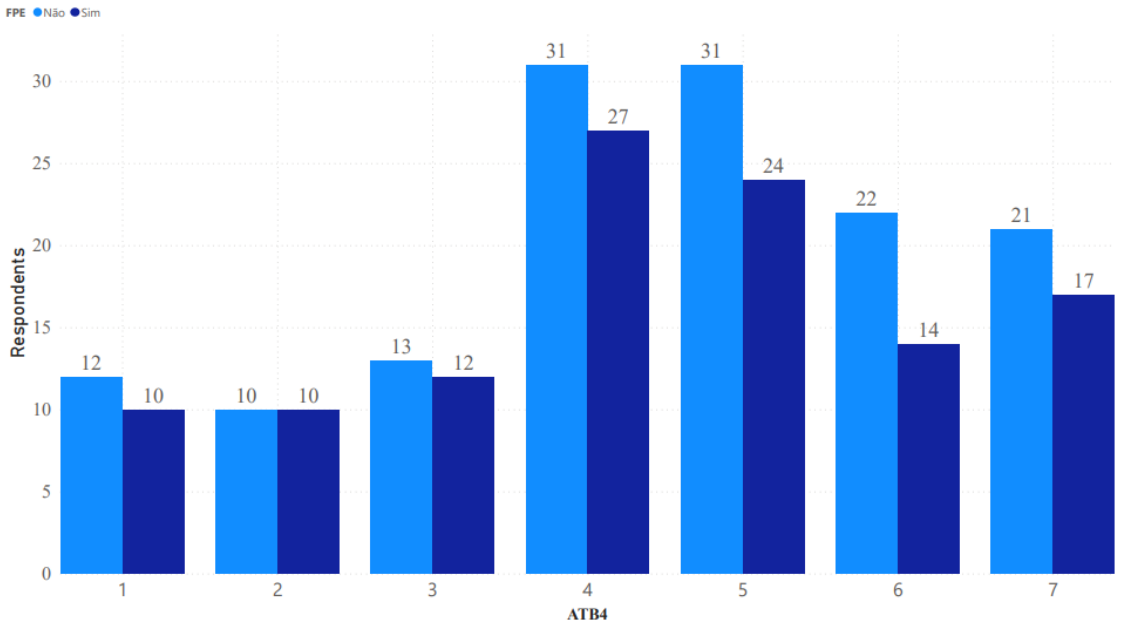
ATB2 - I think investments should take into consideration the social and environmental damage they cause



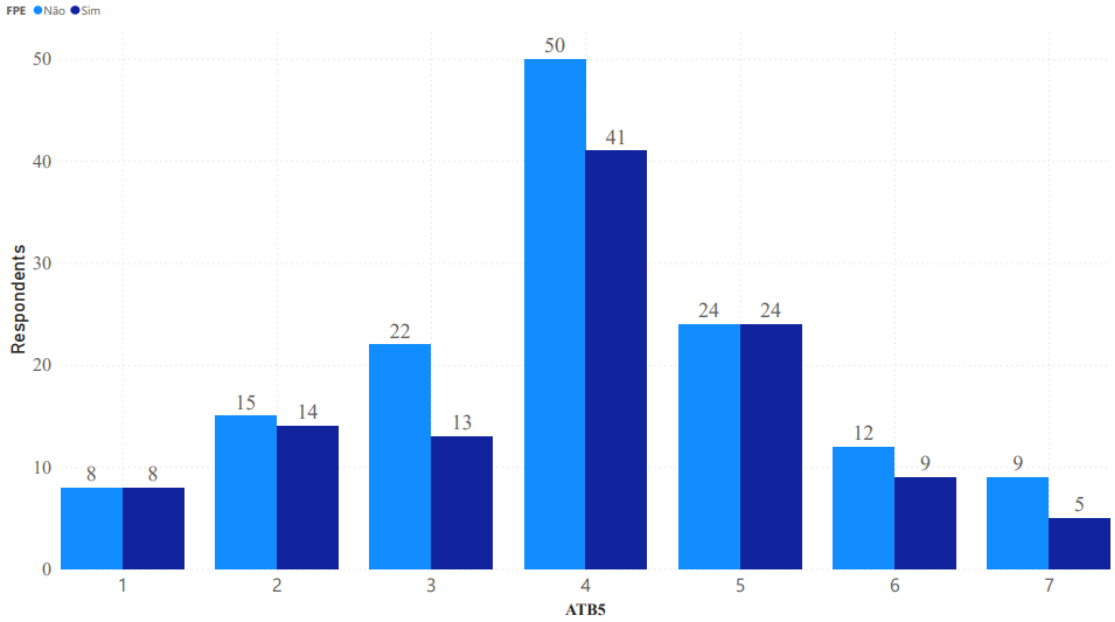
ATB3 - I think investments should promote social and environmental solutions.



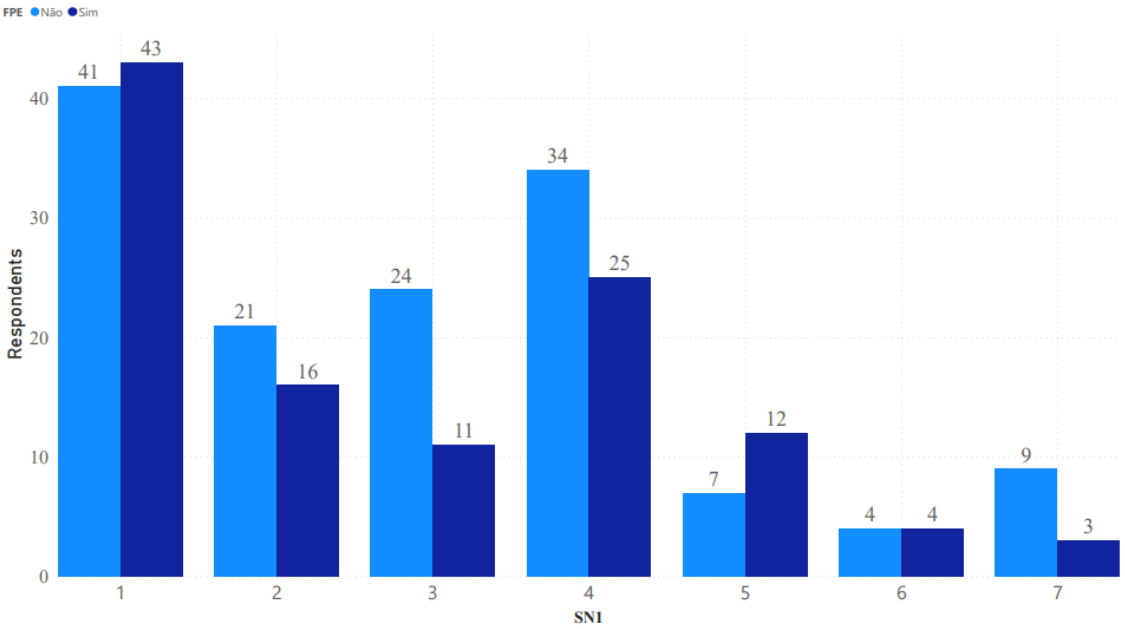
ATB4 - I am convinced that impact investments promote solutions to social and environmental challenges in an effective way



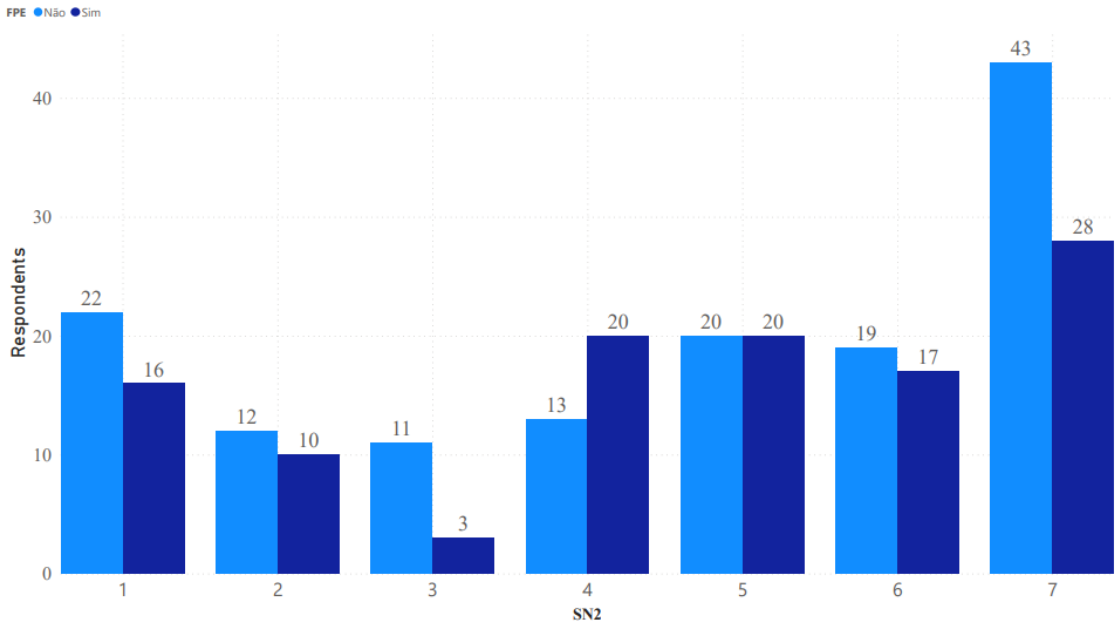
ATB5 - I think impact investments yield high financial returns.



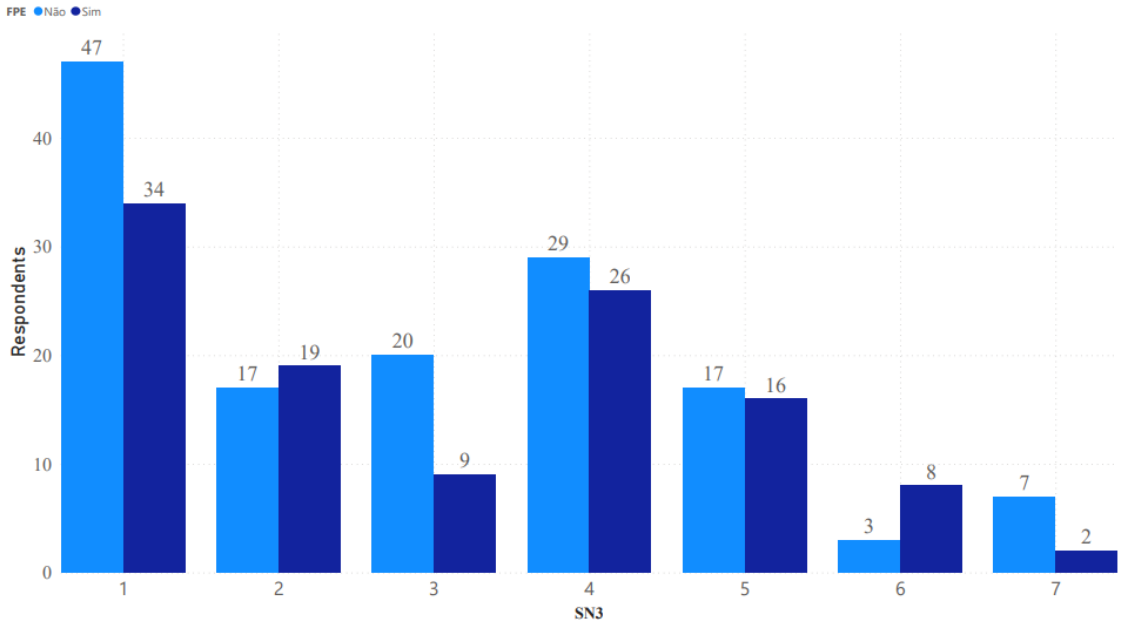
SN1 - My family members expect me to invest in impact investing



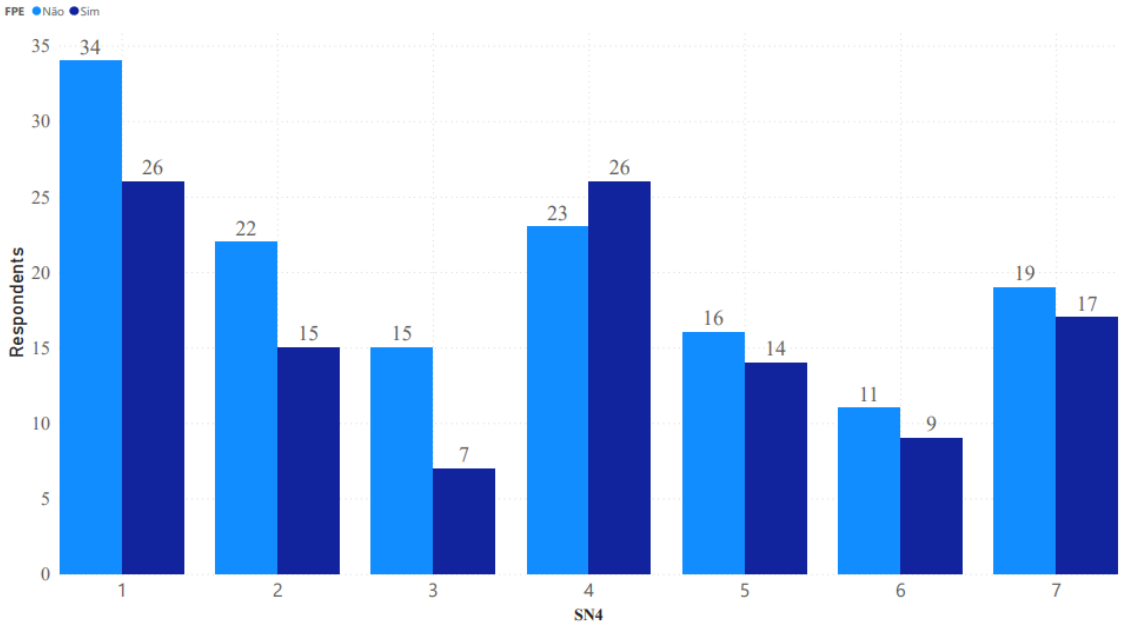
SN2 - My family members would be aware of my investment decision.



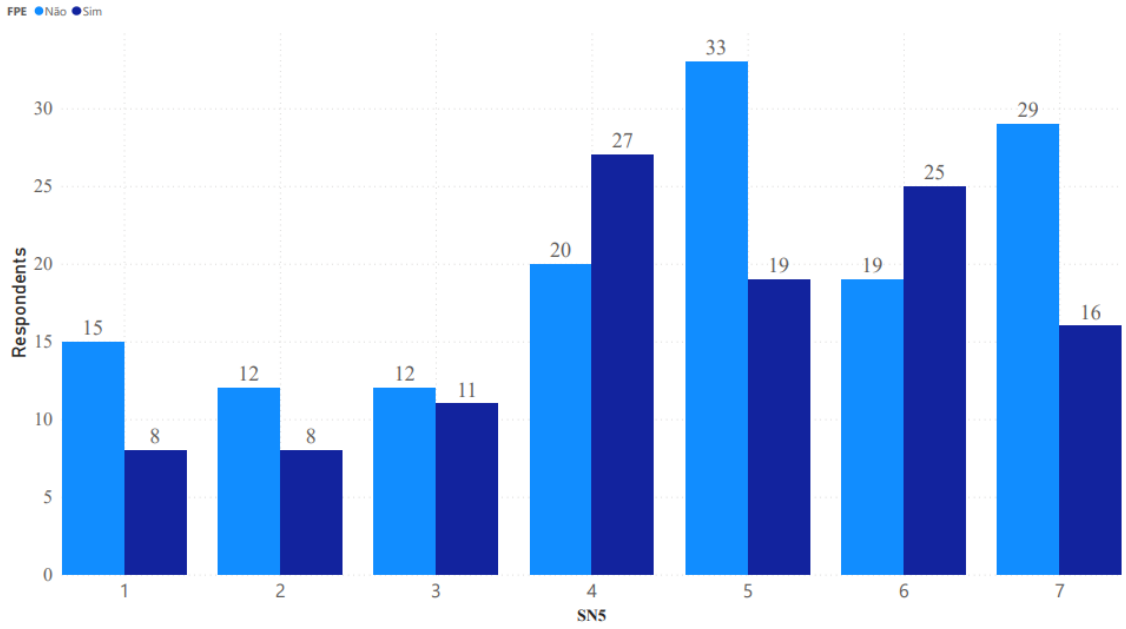
SN3 - People with whom I closely relate expect me to invest in impact investing



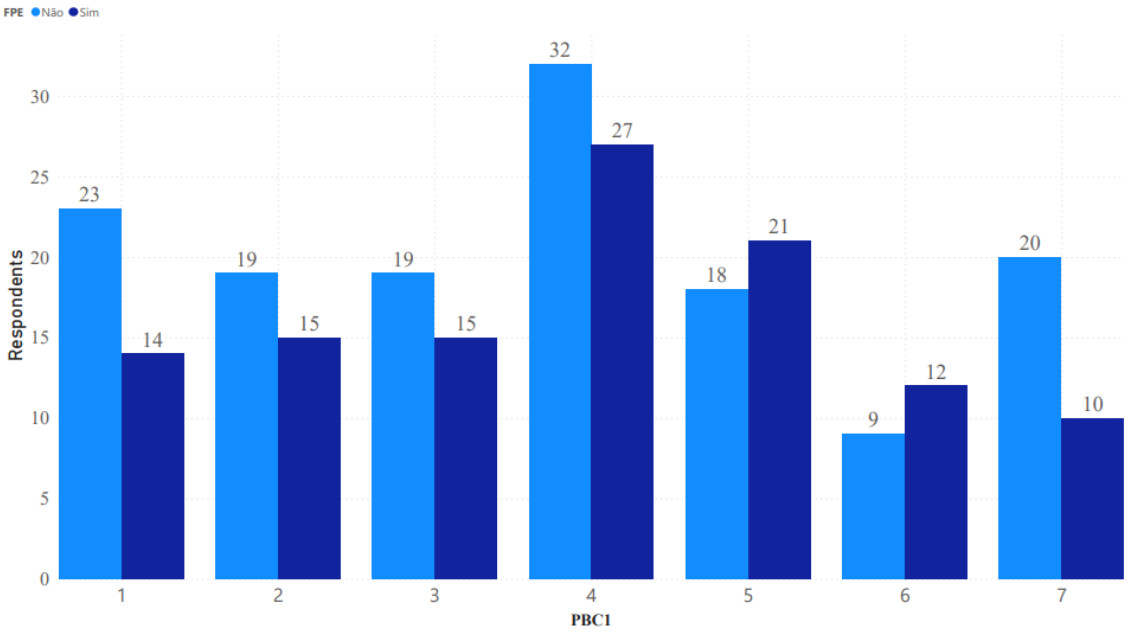
SN4 - People with whom I closely relate would be aware of my investment decision



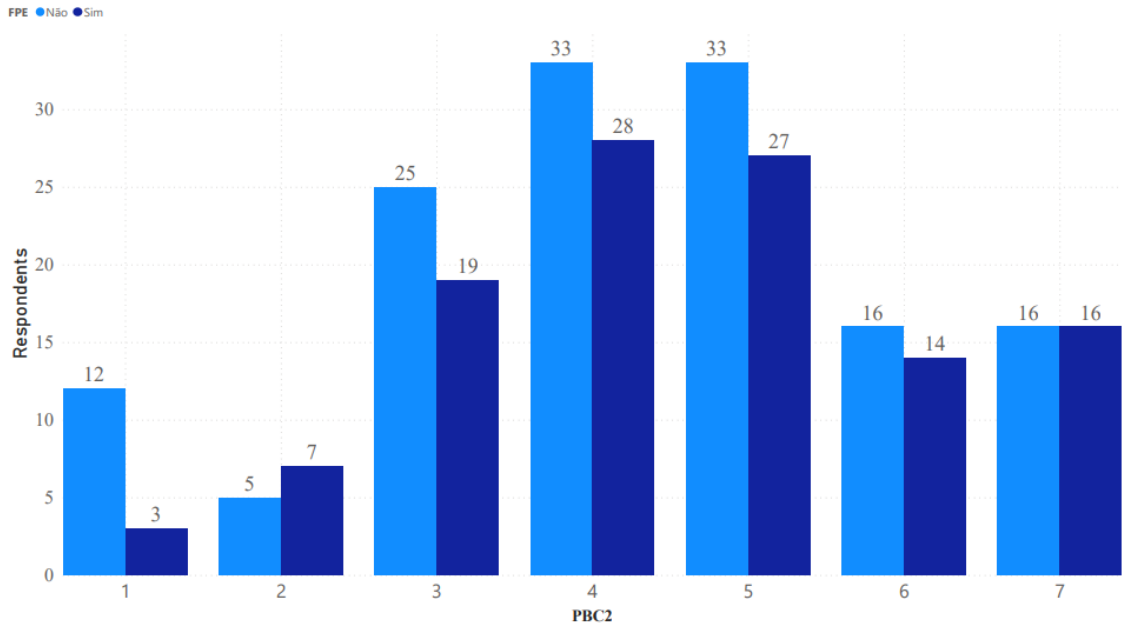
SN5 - There is a strong need to do something for the society and the environment, which is one of the reasons I should do impact investing



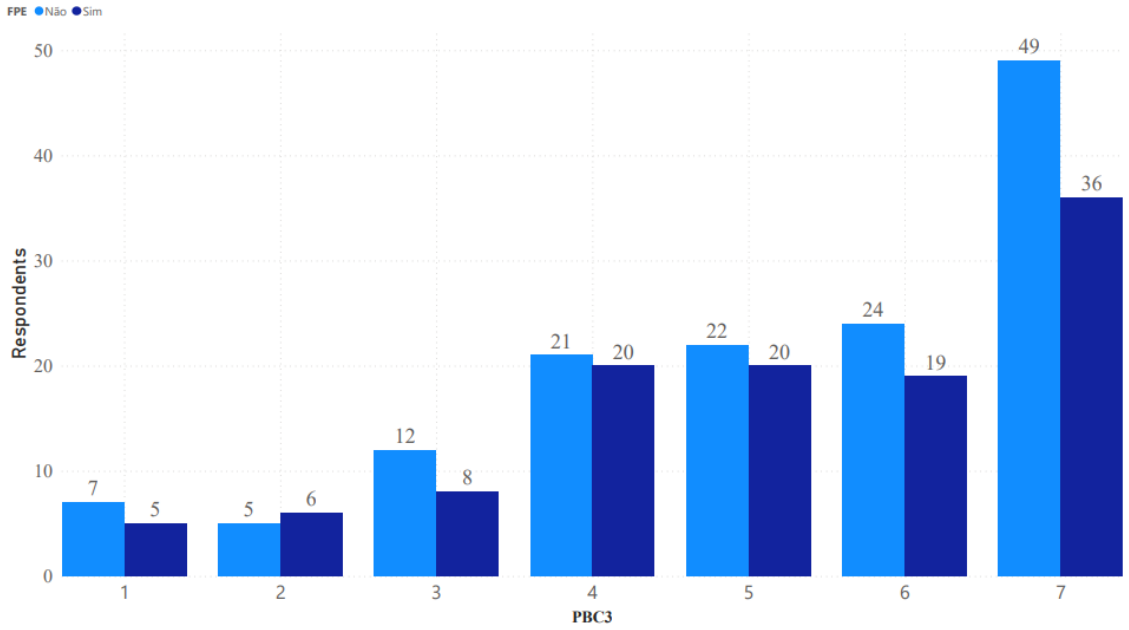
PBC1 - I feel confident about being able to engage in impact investments



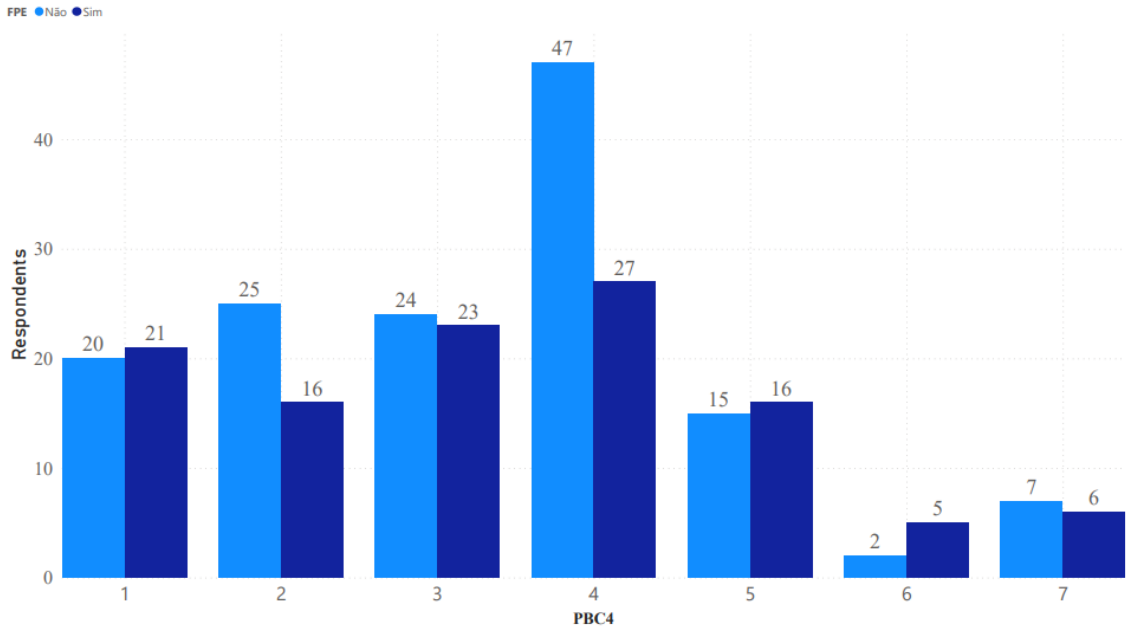
PBC2 - I am able to overcome the obstacles or problems which could prevent me from engaging in impact investments.



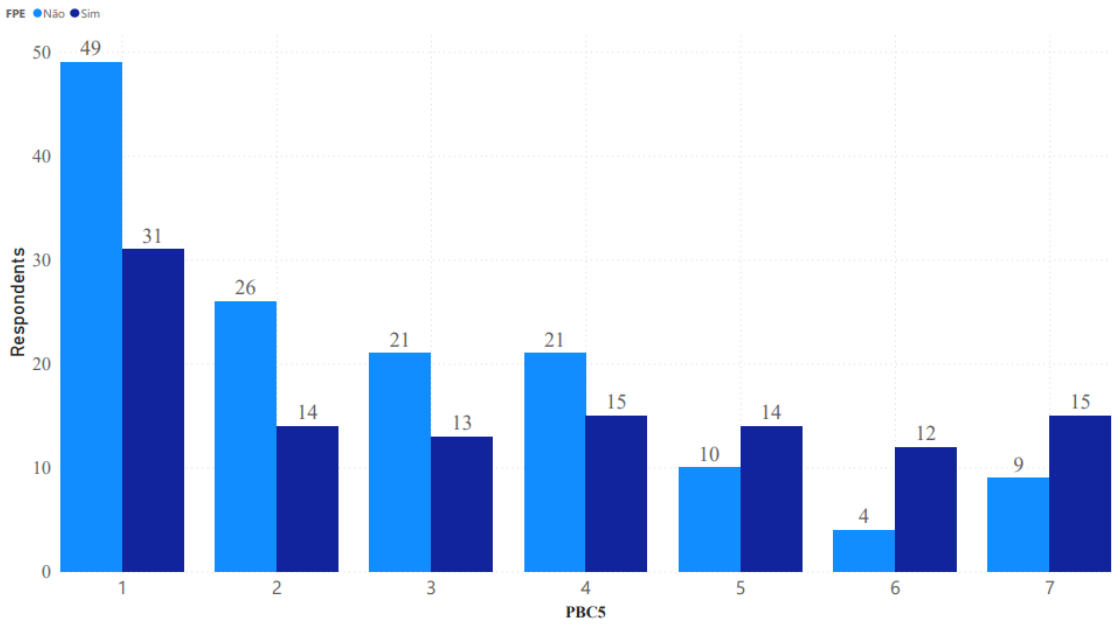
PBC3 - Engaging in impact investments is within my own control.



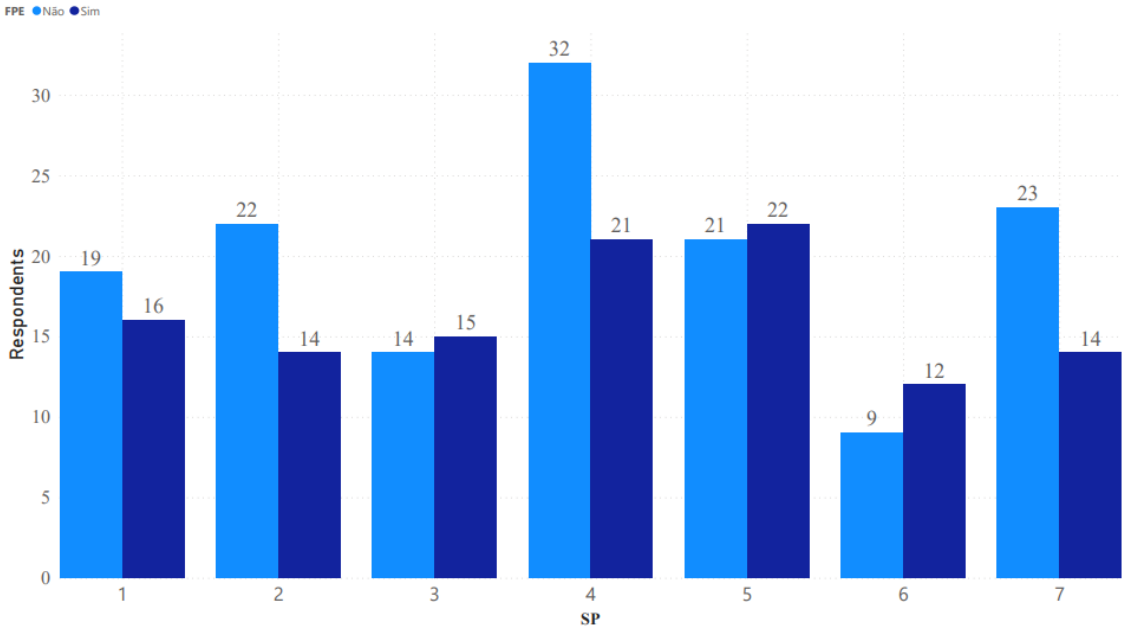
PBC4 - Engaging in impact investments is easy.



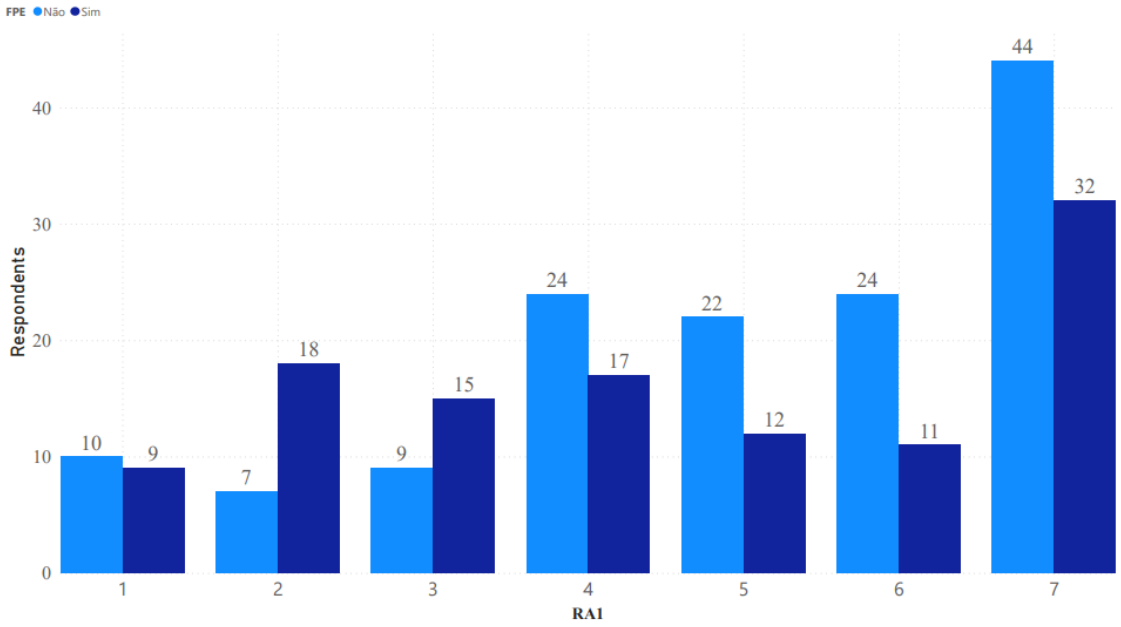
PBC5 - I think I have sufficient knowledge which enables me to engage in impact investments



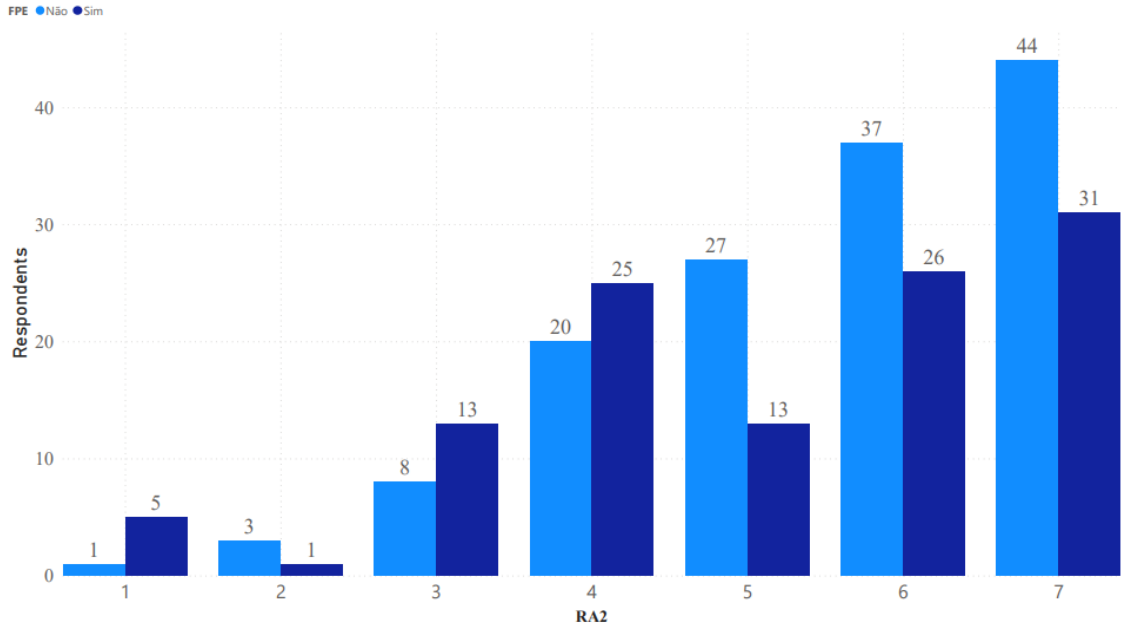
SP - How willing are you to give money to good causes without expecting anything in return?



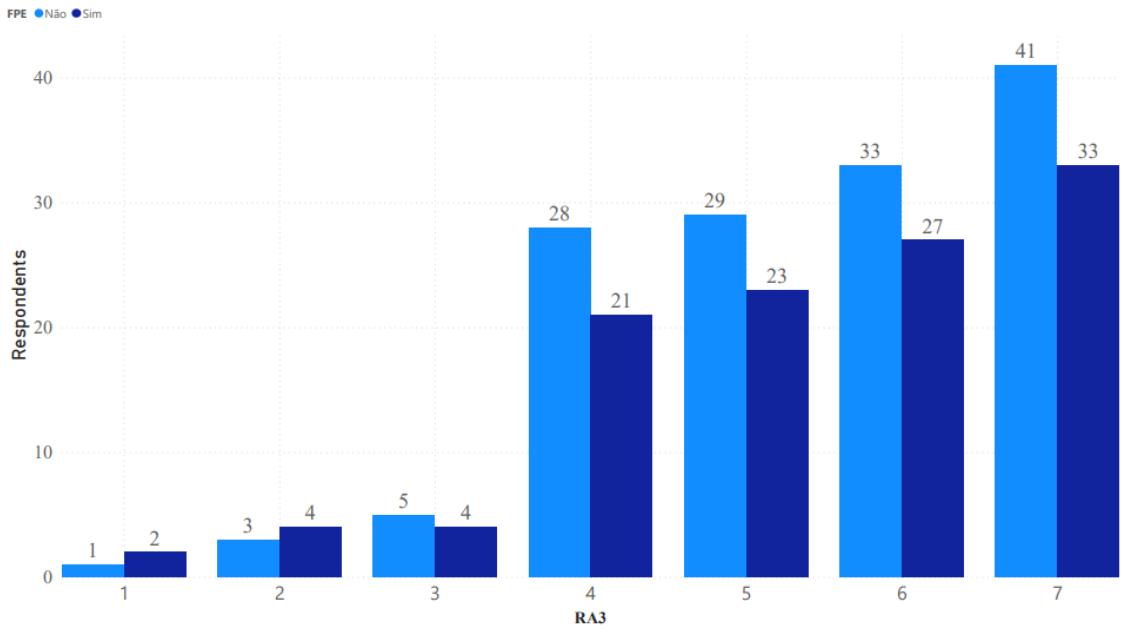
RA1 - The risk of losing money on the financial market causes mental stress.



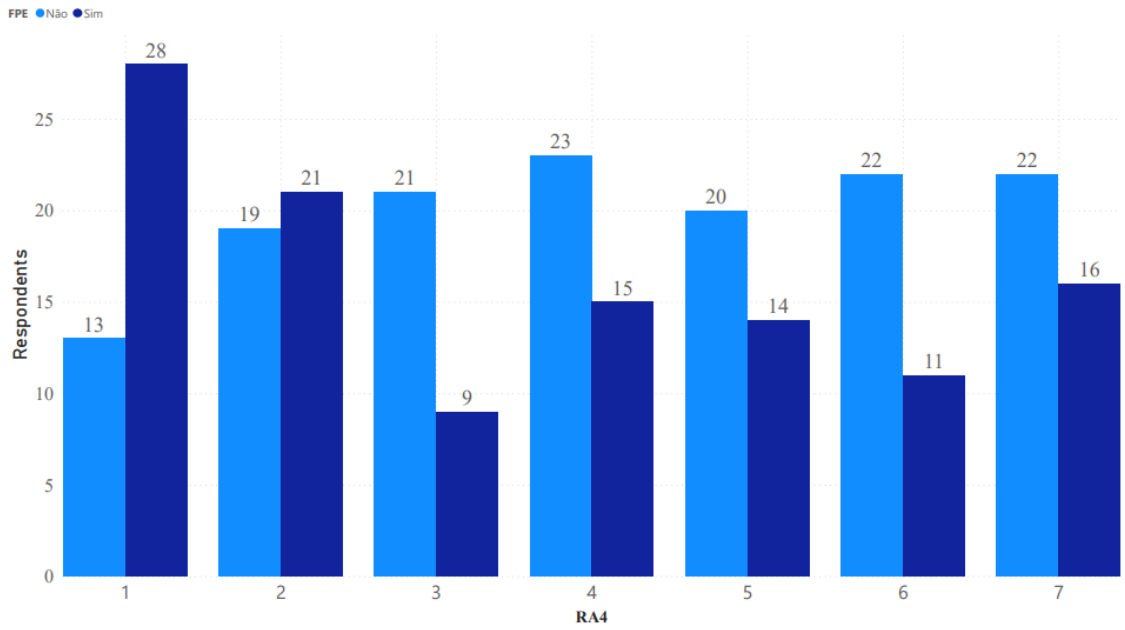
RA2 - Stability of my investments is more important to me than the chance of a quick profit



RA3 - Continuity of my investments is more important to me than the chance of a quick profit



RA4 - Even small financial losses make me nervous.



RA5 - I am reluctant to take risks regarding financial matters