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IMPACT INVESTMENT INTENTIONS OF GENERATION Z: EXPLORING THE FACTORS THAT DRIVE YOUNG PRIVATE INVESTORS TO DECIDE FOR ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) FUNDS

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ABSTRACT

This study employs multiple linear regression analyses to investigate the factors influencing Generation Z's (Gen Z) intention to invest in Environmental, Social, and Governance (ESG) funds. By adopting an extended version of the Theory of Planned Behaviour (TPB) as the conceptual framework, a survey of 128 Gen Z individuals reveals that perceived ease of investing, social norms, attitudes, perceived financial performance, risk perception, and consumer effectiveness significantly shape their investment intentions (IINT) in ESG funds. On the other hand, trust and pro-social attitudes, as well as the demographic factors gender, and place of residence did not demonstrate a significant impact. As the first research to explore the motivational drivers of Gen Z in this field, this study fills a gap in the existing literature, providing valuable insights for companies, investment managers, and policymakers to tailor strategies that attract and engage this critical group of investors.

Keywords: Impact Investment Intentions, ESG funds, Generation Z, Theory of Planned Behaviour

Paper type: Research paper

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LIST OF ABBREVIATIONS

SRI.....Socially responsible investing
ESG..... Environmental, social and corporate governance
IINT..... Investment intentions
SN..... Subjective norms
PBC.....Perceived behavioural control
ATT.....Attitude toward the behaviour
TPB..... Theory of Planned Behaviour
Gen Z..... Generation Z
CSR.....Corporate social responsibility
PFP..... Perceived financial performance
PRI.....Perceived risk
SEE..... Social, ethical, and environmental
PSA..... Pro-social attitudes
PCE..... Perceived-consumer effectiveness
VIF..... Variance Inflation Factor

LIST OF SYMBOLS

αcronbach's alpha
yIINT
x_1ATT
x_2SN
x_3PBC
x_4PCE
x_5trust
x_6PSA
x_7PFP
x_8PRI
x_9gender
x_{10}living area
φrandom disturbance term

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1. INTRODUCTION

The global Covid-19 pandemic and its economically devastating consequences have intensified the public debate on social, environmental and economic sustainability. The importance of an intact natural environment and a resource-efficient economy has become the focus of social attention and triggered a change in people's values and attitudes. This shift has also been reflected in the area of financial and capital investment, where the demand for socially responsible investing (SRI) has grown stronger than ever. SRI, also called impact investing, is defined as "an investment discipline that considers environmental, social and corporate governance (ESG) criteria to generate long-term competitive financial returns and positive societal impact" (Jonwall et al., 2022, p.3). Accordingly, ESG funds are investments in companies or industries that are committed to positive environmental, social, and governance practices. The demand for SRI can play a critical role in promoting climate action. Investing in companies or industries that are committed to positive environmental practices, such as reducing greenhouse gas emissions, can contribute to addressing climate change (Folqué et al., 2021). By directing investments towards companies that prioritize climate action and sustainability, investors can help create a more sustainable future and contribute to the achievement of SDG 13 (United Nations, 2015).

Latest research shows that the volume of investment in sustainable assets has increased by 55% globally since 2016, and a study by Bloomberg (2021) demonstrates that this trend is certain to continue, reaching a value of over \$53 trillion by 2025. In addition, the Global Sustainable Investment Alliance (2021) has noted strong growth in retail investors who today account for more than a quarter of total sustainable investment assets. A study conducted by Oxford Risk found that 50% of retail investors plan to shift a majority of their investments into ESG funds by 2022 (Harrison, 2022). Hence, retail investors are a driving force behind the growth of ESG funds and their importance is very likely to increase in the future. In light of this, it has been suggested that companies and asset management firms should direct their focus on the needs of retail investors, securing their attraction and retention in the future.

Given the heterogeneity of this investor group, the proper identification of individual preferences and motivating drivers for ESG investment intentions (IINT) has long remained unsettled. Only in the last thirty years has a body of scholarly research emerged that aims to shed light on retail investors' ESG IINT and underlying decision-making processes. Taking a closer look at the theory, a recurring premise is that ESG investments are made to decrease investors' risk and maximize profits as suggested by traditional investment theories such as the modern portfolio theory (Markowitz, 1968). However, it is also believed that ESG retail investors are motivated by the desire to create a positive impact on society and the ecological environment. This means, impact investors are also driven by altruistic motives which cannot be explained by traditional theories of investment decisions (Nilsson, 2008). Previous studies have examined various behavioral factors such as subjective norms (SN), perceived behavioral control (PBC), and attitude towards the behavior (ATT) derived from the Theory of Planned Behavior (TPB) (Adam & Shauki, 2014; Jonwall et al., 2022; Pérez-Gladish et al., 2012; Sultana & Zainal, 2017; Thanki et al., 2022), as well as other pro-social, financial and

demographic variables impacting individuals' ESG IINT (Gutsche et al., 2018; Nilsson, 2008; Owen & Qian, 2008; Williams, 2005).

Surprisingly, while it has been repeatedly suggested that *age* is an influencing factor (Gutsche et al., 2018; Jonwall et al., 2022; McLachlan & Gardner, 2004; Nilsson, 2008; Owen & Qian, 2008; Pérez-Gladish et al., 2012; Rosen et al., 1991; Shanmugasundaram & Balakrishnan, 2010; Tippet & Leung, 2001) only a few studies have investigated intergenerational differences (Jensen et al., 2016; Krupa et al., 2020) while no study was found that specifically examined the motivational and behavioral factors underlying the IINT of Generation Z (Gen Z) in the area of SRI.

Given that cohort Z's total investment spending is projected to exceed that of baby boomers by 2025, it is crucial to gain a deeper understanding of this important group of retail investors (Oberoi, 2020). While Chen et al. (2019) have provided initial insights into the unique characteristics of Gen Z, based on a cross-cultural study of young individuals' understanding and acceptance of SRI, other factors that may affect individuals' ESG IINT have yet to be explored. Cohort Z exhibits a range of traits and habits that distinguish them from other generations, highlighting the value of generational distinctions in comprehending the diverse motivational and behavioral drivers of impact investment behavior.

Gen Z is believed to be the most racially and ethically diverse generation (Hawkins et al., 2022). Cohort Z places a high value on social issues and actively participates in volunteer activities that are focused on both the environment and society (Casalegno et al., 2022). Their heightened sensitivity towards environmental issues can be attributed in part to the fact that they were born into a world characterized by "volatility, uncertainty, complexity, and ambiguity," as pointed out by van Loggerenberg and Lechuti (2020). This has made them more committed to sustainability and stewardship than any previous generation (Casalegno et al., 2022). In addition, their sensitivity towards environmental issues has resulted in a healthy level of skepticism towards companies and a self-reflective approach to tackling environmental problems (Krahn & Galambos, 2014). Moreover, a significant portion of Gen Z exhibits green and conscious purchasing behavior, taking into account the corporate social responsibility (CSR) components of the companies they buy from (Casalegno et al., 2022). As digital natives, they grew up with portable digital technologies and integrated social media into their daily lives from a young age, which has influenced their approach to financial advice. They tend to seek financial and investment advice on social media and from friends and online influencers (Hawkins et al., 2022). Furthermore, Gen Z is perceived as less risk-averse than other generations (Wolff-Mann, 2020) and has the ability to gather and compare a wide range of knowledge while integrating virtual and offline experiences (Francis & Hoefel, 2022). These distinctive characteristics of Gen Z have a profound impact on their IINT, making further analysis of their IINT in the context of ESG funds particularly valuable (Shanmugasundaram & Balakrishnan, 2010).

Hence, to fill a research gap, this study aims to explore whether the TPB - in conjunction with other financial and pro-social factors - can predict Gen Z's ESG IINT. Additionally, the study will identify which factors hold the most significant influence over them. By doing so, the

author aims to contribute to the existing literature on motivational and behavioral drivers of impact investing, enabling companies, investment managers, financial advisors, and policymakers to develop sustainable investment strategies that align with the needs, concerns and priorities of Gen Z investors.

2. RESEARCH QUESTIONS

This study tries to find answers to the following two research questions:

RQ1: What factors influence Gen Z's ESG IINT?

RQ2: Among the variables that influence Gen Z's ESG IINT, which ones have the greatest impact?

3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In the literature, the term "impact investing" has been used interchangeably with other terms such as SRI, ethical finance or sustainable investing. Although these terms describe the same activity in principle, there is an important difference between them that needs to be distinguished. Agrawal and Hockerts (2021) describe that SRI is often used as an umbrella term for investing in publicly traded securities that favor strong ESG policies, and involves various stakeholders such as institutional investors, banks, governments, and socially responsible mutual funds. In contrast to impact investing, however, Quinn and Munir (2017) point out that SRI and ethical investing focus primarily "on the negative screening of alcohol, tobacco, and firearms, and a range of businesses and activities which do not damage society" (Quinn & Munir, 2017, p. 118). On the contrary, impact investing takes a rather proactive investment approach in which investors actively seek to invest in cooperations whose goal is to create both a positive social or environmental impact as well as commercial value (Agrawal & Hockerts, 2021). Impact investing, therefore, pursues a dual purpose of generating social benefit and financial profit while highlighting the proactive stance of investors (Tekula & Shah, 2016). Furthermore, Agrawal and Hockerts (2021) note that the level of participation among SRI investors is lower than that of impact investors, which is why they oppose viewing impact investment as equivalent to SRI and sustainable investing. However, given the non-professional background of the retail investors in this study, as well as the minor differences between the terms, the concepts of impact investing, SRI, and ESG investing are used interchangeably for the purposes of this study.

3.1. The theoretical background of impact investing

As interest in SRI has grown, researchers have sought to understand the reasons and motivational drivers behind people's decisions to consider CSR issues when making investment decisions. Early research has primarily concentrated on traditional demographic profiling and the assumptions of neoclassical utility maximization (Owen & Qian, 2008). For instance, Rosen et al. (1991) were among the first scholars to examine SRI behavior and map the impact investor

profile. The authors conducted a survey of 1,493 investors to identify the distinguishing characteristics of SRI investors. The results of the study showed that impact investors were younger, more educated, and attached more importance to environmental issues and labor relations than their non-SRI counterparts. Further, Rosen et al. (1991) concluded that SRI investors were not willing to compromise their financial returns for the sake of ethical investment practices. These findings are consistent with the results of a subsequent study by Nagy and Obenberger (1994) who concluded that traditional wealth maximization objectives dominate impact investors' decision-making processes. Further, Lewis and Mackenzie (2000) found that impact investors hold mixed portfolios which equally suggested no clear evidence for ethical preferences.

In contrast to the traditional economic framework, another line of research emerged which considers ethical investments appealing to more complex behavior models based on psychology. Cullis et al. (1992) argued that ethical investment is a complex decision that involves a trade-off between financial and ethical considerations. They found that ethical investors were willing to sacrifice financial return for better ethical scores which means that wealth maximization was not the primary motivation of ESG shareholders. Building on these findings, Webley et al. (2001) disclosed that ethical investors were more likely to consider the societal and environmental impact of their investment choices. Additionally, they even increased their investments in ESG funds despite poor performance, indicating that their investment decisions were primarily motivated by ideology and identity, shaped by individuals' convictions, principles, and attitudes towards social and environmental issues.

This argument has gained great support in recent studies that focus on theories beyond the conventional risk and return framework, emphasizing that investors may not always demonstrate rationality (Beal et al., 2005; Gutsche et al., 2018). Behavioural finance proposes improved explanations for financial phenomena by drawing on concepts and data from the psychology literature (Beal et al., 2005). For example, Williams (2005) surveyed ethical investors across five countries and identified a range of factors that motivated them, including ethical considerations, environmental concerns, certain demographic values, and other non-financial returns. Furthermore, scholars have put forth two other factors, psychic returns and social change, which influence individual decisions to invest in SRI beyond financial returns (Beal et al., 2005). Social identity influences investing decisions as well, according to Bauer and Smeets (2015), who discovered that individuals are more willing to invest in firms that correspond with their social identity. These findings suggest that consumer behavior and attitudes toward social welfare are mirrored in portfolio strategies and that non-financial variables play an important part in SRI decision-making (Owen & Qian, 2008).

3.2. Theory of Planned Behaviour

One of the most widely used models for studying human behavior, including investment decision-making, is the TPB, which was developed by Ajzen in 1985. The TPB builds upon the Theory of Reasoned Action (TRA) proposed by Fishbein and Ajzen (1975), and it allows

researchers to predict behavioral intentions based on three key variables: ATT, SN, and PBC. ATT refers to an individual's stance on a given subject and SN refers to the social pressure placed on them to perform a behavior. PBC indicates the extent to which an individual believes they have the resources, skills, and opportunities necessary to accomplish the intended behavior. According to Ajzen (1985), these three variables constitute an individual's intention, with PBC being believed to have a direct influence on their behavior. The underlying concept of the TPB is that most behaviors are under an individual's voluntary control, which means that they may choose whether or not to perform a particular behavior.

Armitage and Conner (2001) conducted a meta-analysis of 185 studies and discovered that the TPB model could account for approximately 33% of the variation in intention and behavior. This proved the model's predictive capacity and established it as a legitimate foundation for future research. Moreover, the TPB model has been utilized for decades in various contexts, such as green consumption behavior (Paul et al., 2016; Tsai-Feng Kao & Yi-Chan Tu, 2015), charity and philanthropy (Knowles et al., 2012; van der Linden, 2011) and studies focusing on Gen Z consumers (Chaturvedi et al., 2020; Lavuri et al., 2021; M. T. T. Nguyen et al., 2019; Saut & Saing, 2021). Within the area of investment decisions, East (1993) was the first scholar to apply the TPB to predict IINT and behavior. The study also suggested that financial knowledge and experience may play a role in shaping ATT and PBC. Many other scholars followed his approach and equally used the TPB model to elaborate on East's (1993) results (Akhtar & Das, 2018; Alleyne & Broome, 2011; Mahardhika & Zakiyah, 2020; Phan & Zhou, 2014). Building on that, several research studies in the field of SRI have confirmed the effectiveness of using the TPB as a means of investigating how individuals make decisions (Adam & Shauki, 2014; Apostolakis et al., 2018; Gamel et al., 2022; Hofmann et al., 2008; Jensen et al., 2016; Thanki et al., 2022).

Ajzen (1991) recognized that individual behavior can be influenced by factors beyond ATT, SN, and PBC. Therefore, he suggested that adding more variables to the TPB model could be beneficial, as long as they enhance the explanation of the target behavior. As a result, most of the aforementioned studies have extended the model by incorporating additional variables that could explain individual intentions toward the respective behavior under investigation. For instance, Lee et al. (2018) and Vassallo et al. (2016) suggested that demographic factors, personality traits, and past experiences could enhance the predictability of the theoretical model in this domain. In the area of ESG investing, Adam and Shauki (2014) incorporated moral norms to forecast ESG IINT, whereas Thanki et al. (2022) explored the impact of factors such as collectivism, SRI awareness, and environmental concerns on their potential influence on ATT and, therefore, indirectly on ESG IINT.

To advance this line of research, this study follows the work of previous researchers and equally extends the TPB framework by two financial variables and three pro-social variables. Two socio-demographic variables are added as control variables. By doing so, this study aims to enhance the comprehension of the factors that influence Gen Z individuals' ESG IINT.

3.3. Attitude

ATT refers to a person's overall evaluation or feeling about a particular object, idea, person, or situation, which can range from positive to negative (Ajzen, 1985). In the scope of this study, ATT relates to whether the individual perceives investing in ESG funds as favorable or unfavorable. The correlation between ATT and IINT has been established for quite some time and has been confirmed through empirical research, as evidenced by studies in the field of conventional investing (Akhtar & Das, 2018; Alleyne & Broome, 2011; East, 1993; Mahardhika & Zakiyah, 2020; Phan & Zhou, 2014) and sustainable investing (Adam & Shauki, 2014; Apostolakis et al., 2018; Hofmann et al., 2008; Mehta et al., 2021; Thanki et al., 2022). However, there are also some studies that have not been able to significantly predict a positive linkage between investors' ATT towards ESG investing and their IINT in such funds (Gamel et al., 2022; Jensen et al., 2016).

The controversy over the link between ATT and intent to ESG IINT underscores the need to consider the results of scientific research in the area of green consumer behavior. A review of relevant literature demonstrates that scholars have repeatedly documented a positive correlation between ATT and the intention to engage in ecologically responsible behaviors (Al Mamun et al., 2018; Shen et al., 2022). This finding also applies to the literature on green consumption intentions and ATT among members of cohort Z (Chaturvedi et al., 2020; Lavuri et al., 2021; M. T. T. Nguyen et al., 2019; Saut & Saing, 2021). Given that Gen Z has been characterized as one of the most environmentally conscious generations (Casalegno et al., 2022), this study anticipates that ATT will have a favorable effect on ESG IINT. Thus, the following hypothesis is proposed:

H1a: There is a positive relationship between ATT and Gen Z's ESG IINT.

3.4. Subjective norm

Within the context of this study, SN refers to an individual's perception of whether someone who holds significant importance to them considers investing in ESG funds as desirable, as well as whether the individual should invest accordingly. This construct is a representation of the social pressure that an individual may experience, which can ultimately increase their likelihood of engaging in SRI (Ajzen, 1985). Extant literature suggests that SN is a reliable predictor of an individual's IINT, encompassing both traditional (Akhtar & Das, 2018; Alleyne & Broome, 2011) and ESG investment choices (Adam & Shauki, 2014; Apostolakis et al., 2018; Gamel et al., 2022; Gutsche et al., 2018; Hofmann et al., 2008; Jensen et al., 2016; Thanki et al., 2022). Only a few scholars have found that SN have a limited or insignificant predictive power within the TPB framework (Armitage & Conner, 2001; Sheppard et al., 1988).

Further, when examining research in the field of green consumption among Gen Z, a positive correlation between SN and green behavioral intentions has been established (M. T. T. Nguyen et al., 2019; Saut & Saing, 2021). This suggests that family and friends play a significant role

in influencing the purchasing decisions of this demographic. As described by Hawkins et al. (2022), individuals within cohort Z tend to seek financial and investment advice on social media and rely on support from friends and online influencers, making a positive correlation between SN and ESG IINT feasible. This leads to the following hypothesis:

H1b: There is a positive relationship between SN and Gen Z's ESG IINT.

3.5. Perceived behavioural control

The construct of PBC refers to an individual's perception of the ease or difficulty of engaging in a specific behavior. Conceptually, PBC can be seen from two distinct perspectives: firstly, as a function of the contingent availability of necessary resources and opportunities required to execute the intended behavior; or alternatively, as a reflection of constraining factors that may impede the individual's ability to engage in the target behavior (Ajzen, 1991). With regard to impact investing, recent scholarship posits that PBC encompasses the investor's access to related investment opportunities and their ability to engage in this behavior (Adam & Shauki, 2014). Moreover, Gamel et al. (2022) have pointed out that awareness of limited resources, such as financial capital or knowledge of the existence of ESG investment possibilities, is also a critical aspect of PBC in impact investing. Notably, recent analyses have shown that PBC explains a significant portion of the differences observed in individuals' intentions to engage in certain actions (Armitage & Conner, 2001). Moreover, it directly influences the subsequent behavior of individuals. This hypothesis finds support in the research of various scholars who have identified PBC as a significant predictor of IINT (Akhtar & Das, 2018; Alleyne & Broome, 2011; Mahardhika & Zakiyah, 2020; Phan & Zhou, 2014), also in the context of SRI (Apostolakis et al., 2018; Gamel et al., 2022; Jensen et al., 2016; Thanki et al., 2022). Furthermore, in the context of environmentally conscious consumption, Gen Z was found to have a stronger intention to act in an environmentally conscious manner when they perceive that it is easy to do so (Lavuri et al., 2021; M. T. T. Nguyen et al., 2019; Saut & Saing, 2021). Therefore, this study aims to test the following hypothesis:

H1c: There is a positive relationship between PBC and Gen Z's ESG IINT.

3.6. Perceived financial return

Financial return has been a key metric influencing IINT and asset allocation decisions. According to finance theory, there is a positive correlation between risk and return, which implies that higher risks should lead to higher potential returns (MacGregor et al., 1999). Several studies have compared risk and financial performance levels of ESG and conventional funds but results of these studies have varied significantly, leading to ongoing debate and controversy (Owen & Qian, 2008). While some studies suggest that ESG funds exhibit lower risk levels and better financial performance (Consolandi et al., 2022; Dalal & Thaker, 2019; Derwall et al., 2005; Khan, 2019), others oppose this view and conclude that ESG investments

perform similarly to traditional ones on a risk-adjusted basis (Górka & Kuziak, 2022; Jain et al., 2019; Kreander et al., 2005; Revelli & Viviani, 2015; Rivoli, 2003; Statman, 2000).

Given the uncertainty surrounding the actual performance of ESG investments, studies examining the perceived financial performance (PFP) and its impact on ESG IINT have yielded varying results (Owen & Qian, 2008). Some studies suggest that high expected financial returns are equally important as the social rewards and altruistic feelings that impact investors receive from their ESG investments (Wins & Zwergel, 2016), while others found them to be less important or almost irrelevant (Beal & Goyen, 1998; Jonwall et al., 2022; Riedl & Smeets, 2017; Williams, 2005). On the other hand, some scholars assert that high financial returns play a crucial role in the selection of ESG funds (Nilsson, 2009; Rosen et al., 1991; Thanki et al., 2022). Moreover, individuals who believe in the strong performance of ESG funds are more inclined to invest in them (Getzner & Grabner-Kräuter, 2004; Jansson & Biel, 2011; Riedl & Smeets, 2017). Consequently, it has also been repeatedly suggested that impact investors are a heterogeneous group that holds diverse beliefs regarding the importance of financial returns of their investments (Beal et al., 2005; Lewis & Mackenzie, 2000; Pérez-Gladish et al., 2012). To this end, Nilsson (2009) classified three segments of SR-investors varying from "primarily concerned about profit" to "primarily concerned about social responsibility" to "socially responsible and return-driven" SR-investors (p.5). Given the contrasting outcomes observed, a closer examination of the PFP variable within cohort Z is warranted and the following hypothesis is proposed:

H2a: PFP is positively related to Gen Z's ESG IINT.

3.7. Perceived risk

As previously mentioned, classic finance theory asserts a positive correlation between return and risk (MacGregor et al., 1999). However, literature distinguishes between objective risk, which is measured by factors such as alphas, betas, or standard deviations (Markowitz, 1968), and subjective risk, which is derived from individual feelings, beliefs, and values (L. Nguyen et al., 2019). This subjective perception of risk varies among individuals, as found by Lewis and Mackenzie (2000) in their study on SRI, where some investors perceived SRI to be more or less risky than regular mutual funds, while others did not see any difference at all. The diversity of perceived risk (PRI) in SRI has led to controversy surrounding the impact of assessed risk on investment decisions in SRI (Lewis & Mackenzie, 2000). Some scholars have been unable to establish significant correlations between the influence of PRI and ESG IINT (Jensen et al., 2016; Nilsson, 2008; Riedl & Smeets, 2017; Wins & Zwergel, 2016). However, others have found a significant negative correlation between PRI and the proportion of SRI held by private investors (Gutsche et al., 2018). Similarly, L. Nguyen et al. (2019) have identified that high levels of PRI can have a negative impact on IINT in general. Based on these premises, this study puts forth the following hypothesis:

H2b: PRI is negatively related to Gen Z's ESG IINT.

3.8. Pro-social attitudes

To gain a deeper understanding of the social, ethical, and environmental (SEE) factors that motivate impact investors to allocate capital to ESG funds, scholars frequently draw upon arguments from the literature on green consumption behavior. It has been proposed that pro-social and pro-environmental consumer behavior is related to people's pro-social attitudes (PSA) (Nilsson, 2008). As such it has been suggested that individuals who care strongly about the environment and society as a whole exhibit stronger altruistic behavior than individuals with lower levels of concern (Laroche et al., Xu et al., 2021). For example, Laroche et al. (2001) discovered that people who care about others and have warm connections are more inclined to buy environmentally friendly items. Recent studies on the green consumption behavior of Gen Z confirm these results and show that those individuals who are environmentally conscious are more likely to be green consumers and purchase eco-friendly products than others (Bulut et al., 2021; Chaturvedi et al., 2020; Lavuri et al., 2021; Saut & Saing, 2021).

In the field of ESG investments, Lewis and Webley (1994) demonstrated that individuals with green attitudes exhibit more favorable views toward SRI, supporting the aforementioned line of research. Additionally, Nilsson (2008) found that PSA significantly influences consumer behavior in a positive way concerning issues addressed by ESG funds. This conclusion was supported by Owen and Qian (2008), and Williams (2005), who discovered that consumers who are concerned about social issues tend to extend their behavior to their portfolio strategies, as well as Jonwall et al. (2022), who identified that impact investors engage in responsible consumption practices and avoid products produced by socially irresponsible firms. Finally, Wins and Zwergel (2016) used PSA as a variable to examine SR behavior and concluded that sustainable fund investors exhibit higher values for pro-social attitudes on average. Given the argument above, as well as Generation Z's strong environmental and social awareness (Casalegno et al., 2022), the following hypothesis is proposed:

H3a: PSA is positively related to Gen Z's ESG IINT.

3.9. Perceived consumer effectiveness

In addition to PSA, Nilsson (2008) incorporated two other pro-social factors into the SEE construct: perceived-consumer effectiveness (PCE) and trust. PCE is the belief that an individual's actions can result in positive social change, which strongly influences the motivation to engage in those actions (Ellen et al., 1991). PCE has been extensively researched as part of studies on SRI intentions and behavior and has consistently been identified as a driver of ESG IINT (Apostolakis et al., 2018; Jensen et al., 2016; Nilsson, 2008; Wins & Zwergel, 2016). This finding is supported by a literature review on the sustainable purchasing behavior of Gen Z, which suggests that individuals are more likely to make environmentally conscious decisions and green purchases when they believe that their actions or purchases will have a meaningful impact (Ellen et al., 1991; Kautish & Sharma, 2020; Ng & Law, 2015; N. Sharma & Dayal, 2017).

H3b: PCE is positively related to Gen Z's ESG IINT.

3.10. Trust in ESG investments

The construct of trust in the context of ESG investments has received limited attention in previous literature. One of the pioneering scholars in this area was Nilsson (2008), who investigated individuals' levels of confidence in the authenticity of "the pro-social attributes offered by the SRI provider" (p. 316). He argues that skepticism towards pro-social claims made by companies is prevalent among consumers, as they have often been misled by advertising campaigns and false promises in the past. This skepticism could pose a significant challenge for marketers of SRI products, as it can lead to a lack of consumer confidence and subsequent rejection of sustainable investment products (Nilsson, 2008). Indeed, research in the field of green consumer behavior has emphasized the significant impact of brand and company trust on individuals' purchasing decisions. It has been found that a lack of consumer confidence can result in skepticism and confusion, ultimately leading to the rejection of green products (Albayrak et al., 2011; Crane, 2000; A. P. Sharma, 2021). Moreover, consumers who lack knowledge and trust in sustainable products encounter more barriers to converting their attitudes into sustainable purchasing behavior (A. P. Sharma, 2021).

On the other side, studies examining the relationship between the social construct of trust and intentions towards ESG investing have yielded inconclusive results. While Nilsson (2008) did not establish a significant link between trust and IINT, recent research by Wins and Zwergel (2016) provided scientific support for the assumption that trust in pro-social claims positively influences investment behavior towards SR funds.

Therefore, this study aims to address this inconsistency and validate the limited findings on the influential impact of trust on ESG IINT. Drawing on literature about Gen Z, it can be argued that skepticism towards ethical and social claims could be a significant barrier to sustainable investment decisions. Casalegno et al. (2022) identified cohort Z as sensitive to environmental problems and skeptical of companies, particularly in matters of communication. Post-millennials attach greater importance to transparency and interaction in communication than any prior generation (Krahn & Galambos, 2014). Additionally, according to Bulut et al. (2021), Gen Z demonstrates a high level of sensitivity towards greenwashing practices, resulting in a decrease in their perception of effectiveness and motivation to participate in green action. Therefore, this study proposes the following hypothesis:

H3c: Trust in companies' SR actions is positively related to Gen Z's ESG IINT.

3.11. Demographics

Previous scholars have attempted to map the profile of impact investors and examine the sociodemographic characteristics that distinguish them from traditional investors. In addition

to age, education level, and income, gender has been one of the most researched socio-demographic variables. Rosen et al. (1991) were the first to propose that women are more likely to participate in impact investing than men. This assertion has received both support and opposition in subsequent years. For instance, Beal and Goyen (1998) and Tippet and Leung (2001) provided evidence that supported Rosen et al.'s (1991) claim. More recent research has also indicated that the percentage of women engaging in ethical investing is higher than the one of men (Junkus & Berry, 2010; Owen & Qian, 2008; Schueth, 2003; Wins & Zwergel, 2016). Additionally, Nilsson's (2008) research suggests that female investors allocate a greater percentage of their investments to ESG funds than their male counterparts. Schueth (2003) tries to explain that occurrence by stating that "women have [...] a natural affinity to the concept of socially responsible investing" (p.192).

On the other side, studies indicate that women, in general, exhibit greater risk aversion and are less overconfident than men (Barber & Odean, 1998; Lascu et al., 1997). It remains uncertain how this affects ESG IINT considering the diverse findings regarding whether ESG funds carry more or less risk and return. Establishing a possible correlation between socio-demographic variables and ESG investments thus proves challenging. Some researchers have even found no correlation at all (Williams, 2007), while others report contradictory outcomes, such as Jonwall (2022), who posits that impact investors are more likely to be male.

However, one perspective drawn from arguments on green consumption behavior suggests that women are more inclined towards green products than men. This view stems from the notion that female consumers exhibit higher ecological consciousness than their male counterparts due to their social identification (Zhao et al., 2021). Therefore, the present study also hypothesizes:

H4a: There is a significant difference between the ESG IINT of female and male members of Gen Z.

Furthermore, within the socio-demographic framework, it has been suggested that an individual's place of residence can influence their ESG IINT. Beal and Goyen (1998), Williams (2007), Nilsson (2008), and Pérez-Gladish et al. (2012) have proposed that residents of larger cities are more affected by ESG concerns than those living in rural regions. As a result, they believe that urban investors are more likely to invest a bigger share of their investment portfolio in ESG funds than rural investors. However, only Beal and Goyen (1998) reported statistically significant results for their hypothesis. Given the limited research in this area, this study proposes the following hypothesis:

H4b: There is a significant difference between the ESG IINT of Gen Z members residing in urban areas and those residing in rural areas.

4. METHODOLOGY

4.1. Research Design

This study adopts a quantitative research methodology and employs IBM SPSS Statistics 28 software to execute statistical analyses and tests. The conceptual model (figure 1) used in this study is an extended version of the TPB model. To examine the multiple hypotheses, first, the correlation between the variables was examined using correlation analyses. Subsequently, a two-sided Mann-Whitney U test was conducted to determine if there are statistical differences between the means of the groups. In order to assess the influence of the three constructs on the dependent variable, multiple linear regression was employed, and a regression equation was formulated accordingly.

It is worth noting that while prior studies in the field of Gen Z, TPB, or SRI have utilized both structural equation modeling and multiple linear regression approaches to forecast behavioral intentions, regression analysis has been the predominant method. This also applies to several studies that served as the basis for this research (Apostolakis et al., 2018; Hofmann et al., 2008; Jensen et al., 2016; Lavuri et al., 2021; Nilsson, 2008; Wins & Zwergel, 2016). Therefore, the same method is used in the present study to ensure comparability of research results.

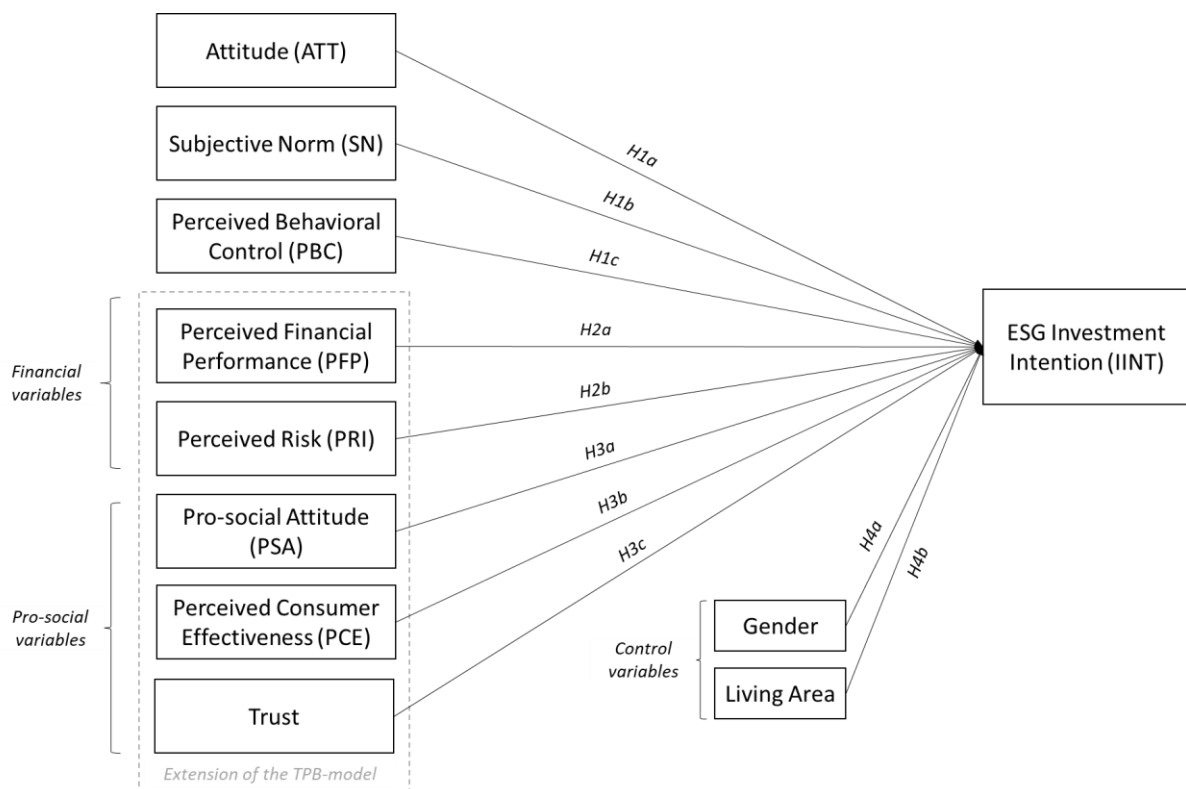


Figure 1. Conceptual model.

Source: own elaboration

4.2. Data collection and scale development

To collect data for the study, the author utilized a self-administered online survey using the non-probability convenience and snowball sampling technique (Bryman & Bell, 2011) to attain a significant number of respondents. The survey was distributed through various social media platforms, including LinkedIn, WhatsApp, SurveyCycle, and the Copenhagen Business School's email distribution list. To ensure that only Gen Z members participated, a filter question was applied at the beginning of the questionnaire. The survey (Annex A) began with questions regarding participants' investment knowledge, followed by the definition of ESG funds, including impact investing, before asking about their ESG IINT. Subsequently, various questions about the independent behavioral variables followed which covered the TPB model as well as the extended financial and social constructs respectively. Ajzen's (2019) guide was used as the basis for the TPB questionnaire. The socio-demographic aspects of the participants were assessed at the end of the survey.

To test the different variables, the study utilized a set of items sourced from validated literature. Participants were requested to rate their responses using a 5-point Likert scale, which ranged from "strongly disagree" (1) to "strongly agree" (5). The reliability of the scales was assessed using Cronbach's alpha, with an acceptable alpha range set between .60 and .95, following Ursachi et al.'s (2015) recommendation.

The dependent variable IINT was assessed through three items ($\alpha = .857$) that were adopted from previous studies (Jensen et al., 2016; Thoradeniya et al., 2015) following the early approach of Buchan (2005). The independent variables of the TPB construct were equally assessed through three-item scales. While SN ($\alpha = .848$) was assessed based on the global measures developed by East (1993) and Buchan (2005), as outlined in Jensen et al. (2016), ATT also adopted three items from Jensen et al. (2016), based on Buchan's (2005) approach. However, Buchan's (2005) three-item ATT scale was modified to remove its bipolar adjective scale nature (e.g., good-bad) and instead transformed into a 5-point Likert scale for the purpose of ensuring consistency, yielding a reliability coefficient of $\alpha = .724$. Furthermore, PBC was measured using a three-item scale ($\alpha = .831$) adapted from Alleyne and Broome (2011). To evaluate the variables complementing the extended TPB model, the study drew on previous research study designs. Five items were adopted from Nilsson's (2008) scale to assess PSA ($\alpha = .821$), and three items for PCE ($\alpha = .720$), and trust ($\alpha = .733$) respectively. These items have been repeatedly used in recent years by researchers, including Wins and Zwergel (2014) and Jensen et al. (2016). The financial variables, PFP and PRI, were evaluated using a 5-point Likert scale. The items used were sourced from Lewis and Mackenzie's (2000) validated scale, which has been utilized in the SRI literature, as noted by Riedl and Smeets (2017). PFP was rated on a scale ranging from "a much lower rate of return" (1) to "a much higher rate of return" (5), while PRI was assessed on a scale ranging from "much riskier than ordinary investment funds" (1) to "a lot less risky than ordinary investment funds" (5).

5. DATA ANALYSIS

5.1. Participant characteristics

A total of 170 individuals participated in the survey, of which 128 belonged to Cohort Z and thus met the prerequisite for completing the questionnaire (Annex B). Females made up 59.4% of the sample, followed by males at 39.8% and non-binary individuals at 0.8%. As the survey exclusively targeted individuals born between 1997 and 2012 (Dimock, 2019), the majority of respondents fell within the age range of 24 to 26, comprising 49.2% of the sample. The next largest group consisted of participants aged 21 to 23, accounting for 43.0% of respondents, and a smaller proportion, approximately 7%, consisted of younger individuals aged 18 to 20. Lastly, those under 18 years old constituted a minimal percentage, at 0.8%. Consistent with the age group, the majority of respondents reported having a Bachelor's degree (69.5%), while 14.8% have a Master's degree and 14.1% reported a high school diploma as their highest degree. Further, as the survey was distributed through the author's social and professional network as well as through the Copenhagen Business School email distribution list, most respondents were university students (73.4%), while 21.1% were employed, 3.9% were unemployed, and 2% were high school students. Nevertheless, the ratio between respondents with an economic background (59.4%) and respondents without an economic background (40.6%) was quite balanced. The same is true for the investment experience of the respondents. Approximately half of the respondents (52.3%) have owned or currently own financial assets, while the other half (47.7%) indicated that they have never invested in financial assets. Although 57% had heard of ESG funds before taking the survey, only 12.5% had previously invested in them. In line with this, participants rated their investment knowledge as relatively low on average ($M = 2.62$) (Annex C.1). Finally, a question was asked about the area in which participants lived. The ratio of people living in rural areas (35.2%) and urban areas (64.8%) was one-third to two-thirds.

5.2. Correlation analyses

Spearman correlation coefficients were generated to investigate the linear connection between the dependent variable IINT and independent variables at an alpha value of .05. A non-parametric test was chosen since the results of the Shapiro-Wilk test revealed a violation of the normality assumption for all variables (Annex C.2). Furthermore, the Spearman correlation test allows for the examination of correlations between metrically scaled variables and ordinally scaled variables. This is why PRI and PFP could be included in the correlation analysis, along with all metrically scaled independent variables (ATT, SN, PBC, PCE, PSA, trust). To evaluate the strength of the observed relationships, Cohen's standard was used. Under this framework, coefficients falling within the range of .10 to .29 were indicative of a small effect size, coefficients between .30 and .49 represented a moderate effect size, and coefficients surpassing .50 indicated a large effect size (Cohen, 1988).

Results (Annex C.3) indicate a significant positive correlation of a moderate effect size between IINT and the independent variables of the TPB construct, including ATT ($r_p(128) = .38, p < .001$), SN ($r_p(128) = .41, p < .001$), and PBC ($r_p(128) = .31, p < .001$), as well as between IINT and PCE ($r_p(128) = .34, p < .001$). This suggests that as any of the variables (ATT, SN, PBC, or PCE) increase, ESG IINT also increases. Additionally, a significant positive correlation of a small effect size was observed between IINT and trust ($r_p(128) = .27, p < .001$), and between IINT and PFP ($r_p(128) = .18, p < .05$). Hence, an increase in the value of trust or PFP increases the intention to invest in ESG funds accordingly. On the other side, PSA and PRI were not found to significantly correlate with IINT, which is why no relationship could be concluded. However, a small positive correlation between PRI and PSA ($r_p(128) = .24, p < .001$), and a moderate one between PSA and PCE ($r_p(128) = .32, p < .001$) could be observed.

5.3. Hypotheses testing

5.3.1 Two-tailed Mann-Whitney U test

To test whether there is a significant difference between female and male participants' ESG IINT, as well as between urban and rural living individuals, a two-tailed Mann-Whitney U test was conducted. The Mann-Whitney U test is the non-parametric counterpart of the independent t-test (Conover & Iman, 1981) and evaluates whether there are significant differences in the dependent variable across the levels of the independent variable at a significance level of .05. The test was chosen since the preceding Kolmogorov-Smirnov test was significant, indicating that the normality assumption was violated for all of the variables (Annex C.2). Given the non-parametric nature of this statistical analysis, there are no assumptions to be met.

The results of the Mann-Whitney U test revealed to be non-significant in both cases. For the variable gender ($U = 1744, z = -.967, p = .333$), the mean rank for female Gen Z members was 66.55 and for male participants 60.2 which indicates no significant difference in the distribution of the variable IINT (Annex D.1). The same holds for the variable living area ($U = 1863.5, z = -.020, p = .984$), where the mean rank for rural Gen Z members (64.41) was not statistically different from the mean rank for urban Gen Z members (64.55) (Annex D.2). This shows that individuals intentions to invest in ESG funds did not significantly differ depending on their indicated gender as suggested by Rosen et al. (1991) and Wins and Zwergel (2016), or living area as proposed by Beal and Goyen (1998), Nilsson (2008), and Pérez-Gladish et al. (2012).

In addition, the study also compared individuals' ESG IINT based on their educational background, specifically distinguishing between those with a business background and those without. Previous research on SRI has overlooked the potential differences in SRI IINT among individuals with different study subjects (Adam & Shauki, 2014; Hofmann et al., 2008; Jensen et al., 2016; Mahardhika & Zakiyah, 2020). However, considering the potential variations in study content, such as investment and stakeholder theory and CSR, any significant outcome related to this factor could be of significant interest to SR firms, investment managers, and

financial advisors in tailoring their promotional activities accordingly. Consequently, a two-tailed Mann-Whitney U test was performed to investigate possible differences (Annex D.3). The results of the analysis provide no substantial evidence supporting a significant difference between the ESG IINT of Gen Z members with a business background (mean rank = 65.14) and those without a business background (mean rank = 63.57). The Mann-Whitney U test yielded non-significant results ($U = 1927.5$, $z = -.239$, $p = .811$).

5.3.2 Regression analyses

Following the research approach of Apostolakis et al. (2018), Jensen et al. (2016), and Nilsson (2008), this study conducted four distinct multiple regression analyses. The purpose of model 1 was to examine the influential impact of the TPB construct, comprising ATT, SN, and PBC, on ESG IINT. Models 2 and 3 aimed to investigate the predictive power of the social and financial construct respectively. Accordingly, while model 2 included the independent variables of PCE, PSA and trust, model 3 assessed the variables PFP and PRI for their predictive power on ESG IINT. Finally, model 4 encompassed all variables from the preceding models, in order to explore whether the same or different independent variables remained significant in explaining ESG IINT, and to compare the relative predictive power of each variable. To enhance the internal validity of the study and eliminate potential alternative explanations for observed relationships, gender, and living area were included as control variables in all cases (Spector, 2021).

Several assumptions must be satisfied before reviewing the regression findings to guarantee that the models are valid and free of biases. First, the data was checked for outliers that may impair the model's predictive potential. As a result, a graphical boxplot of studentized residuals was created, as well as a case-wise diagnostics analysis. Studentized residuals provide a measure of the deviation between the observed and predicted values of the dependent variable, taking into account the variability and influence of the independent variables. If a residual's value falls outside the "whiskers" of the plot, it is considered an outlier and may be removed after further investigation (Cribari-Neto et al., 2005; Field, 2017). Based on these methods, one outlier was detected in each of models 1 and 3 (Annex E.1, G.1), and two outliers were detected in model 2 (Annex F.1). Following thorough examination, these cases were deemed influential and subsequently excluded from the study. Consequently, the sample size for models 1 and 3 was reduced to $n=127$, while model 2 had a sample size of $n=126$. In the fourth model, no outliers were present, and thus the sample size remained at $n=128$ (Annex H.1).

Following that, the assumption of normally distributed error terms was tested. When the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests are not statistically significant, the residuals histogram exhibits a bell-shaped curve, and the quantiles of the residuals in the probability-probability plot align closely to the diagonal reference line, normality can be assumed (Field, 2017). The findings demonstrate that each of the models analyzed successfully fulfilled all the specified requirements (Annex E.2, F.2, G.2, and H.2). Hence, this indicates that the assumption of normality for the error terms was adequately met in all cases.

Another requirement of the regression analysis is homoscedasticity, which describes the assumption of homogeneous variance in the residuals. This assumption is important to satisfy as the presence of heterogeneous variance can significantly distort the standard error of the regression coefficient. To evaluate homoscedasticity, the residuals were graphically plotted against the predicted values, aiming to observe a random distribution pattern among the dots, as suggested by Field (2017) and Osborne and Walters (2002). Additionally, the assumption was analytically verified using the Breusch-Pagan test. Non-significant results from this test indicate that the assumption of homoscedasticity is successfully met. While the scatter plots and Breusch-Pagan tests of models 1, 2, and 4 showed no evidence of heteroscedasticity (Annex E.3, F.3, and H.3), the results of the Breusch-Pagan test for model 3 were only at the margin of statistical non-significance ($p = 0.05$) (Annex G.3). Consequently, subsequent analyses of model 3 utilized parameter estimates with robust standard errors to counteract possible heteroskedasticity (Annex G.7). These heteroskedasticity robust estimators can be selected via an integrated tool in SPSS (HC3) and are strongly advocated by various researchers such as Hayes and Cai (2007) and Cribari-Neto et al. (2005).

Moreover, the tolerance and its inverse, the Variance Inflation Factor (VIF), were used to assess the different regression models for multicollinearity. The VIF should not exceed 5, with 10 being the highest limit (Field, 2017), and the tolerance should be more than 0.1. Multicollinearity was assumed to be absent because all predictors in the regression model had VIFs less than 5 and tolerances greater than 0.1 (Annexes E.4, F.4, G.4, and H.4).

Lastly, there should be no autocorrelation of the residuals. To test this assumption, a Durbin-Watson test was performed, which should not exhibit values outside the range of 1.5 and 2.5 (Hair et al., 2010). Since the results of all regression models showed values close to 2.0 exclusively, the last assumption was also considered to be met (Annex E.5, F.5, G.5, and H.5).

Following the thorough assessment of the required assumptions, the multiple linear regression analyses were conducted and subsequently analyzed. First, three independent models were run to investigate the individual predictive capacity of each construct with respect to the dependent variable, IINT. This approach was taken to assess the efficacy of each component before incorporating them into a single model. The results of the regression analyses revealed that all regression models were statistically significant. Model 1 $F(5, 121) = 18.25, p < .001$ (Annex E.6) exhibited an adjusted R^2 value of 0.406 which suggests that 40.6% of the variance of the dependent variable can be explained by ATT, SN, and PBC (Annex E.5). Model 2 $F(5, 120) = 8.371, p < .001$ (Annex F.6) shows that the social construct can explain 22.8% of the variance in IINT (Annex F.5), and model 3 $F(4, 122) = 2.816, p = .028$ (Annex G.6) demonstrates that the financial variables PFP and PRI can explain 5.5% (Annex G.5). These results confirm previous research demonstrating the large predictive potential of the TPB construct in the context of IINT (Armitage & Conner, 2001). In contrast, the financial model is least able to explain the variability found in IINT.

Furthermore, a closer examination of model 1 revealed that all independent variables within the TPB construct had a significant positive influence on IINT. SN was shown to be the most powerful predictor ($B = 0.478, p < .001$), followed by ATT ($B = 0.384, p < .001$), while PBC ($B = 0.202, p = .001$) was found to be the least powerful predictor (Annex E.7). Accordingly, when SN, ATT, and PBC increase by one unit, IINT increases by 0.478, 0.384, and 0.202 respectively. In model 2, only PCE ($B = 0.443, p < .001$) demonstrated substantial predictability in connection to IINT. In this case, IINT increases by 0.443 units when an individual's PCE increases by one. Similarly, in model 3, PFP ($B = 0.225, p = .008$) was found as the single significant independent variable influencing ESG IINT (Annex G.7). Further, a noteworthy finding concerns the control variable, gender, which had differing effects across the models. Within the TPB construct, the control variable ($B = -0.282, p = .018$) exhibited a significant negative correlation at an alpha value of .05, showing that female participants have stronger intentions to invest in ESG funds than their male counterparts (Annex E.7). On the other hand, in model 2 and 3, gender had no significant impact on ESG IINT (Annex F.7, G.7). The control variable living area was not found to be significant in any of the models (Annex E.7, F.7 and G.7).

However, in order to address the research question, the constructs were integrated into a single multiple linear regression model, namely model 4 $F(10, 117) = 11.33, p < .001$ (Annex H.6.). With an adjusted R^2 value of 0.449, the results of this analysis demonstrate that the combined predictors explained a significant part of the variance in IINT, accounting for 44.9% of the variability (Annex H.5). Hence, it can be concluded that model 4 demonstrates the best fit among the different models tested and should therefore be considered the most appropriate model for hypothesis testing and comparison of relative beta weights. Accordingly, table 1 shows that the independent variables ATT ($B = 0.314, p = .004$), SN ($B = 0.344, p < .001$), PBC ($B = 0.238, p < .001$), PCE ($B = 0.224, p = .012$), and PFP ($B = 0.161, p < .013$) exhibited a significant positive impact on IINT. A unit increase in each of these variables leads to a respective increase of 0.314, 0.344, 0.238, 0.224, and 0.161 in ESG IINT. Notably, the combined construct also reveals a significant impact of the financial variable PRI on IINT, which was not observed in model 3. The negative coefficient ($B = -0.192$) with a p-value of .018 indicates that an increase in individuals' perceived risk of investing in ESG funds results in a decrease in their intention to invest in them. Overall, PBC ($\beta = 0.285$) and SN ($\beta = 0.272$) appeared as the strongest predictors, followed by ATT ($\beta = 0.239$), PCE ($\beta = 0.212$), and lastly, PFP ($\beta = 0.179$) and PRI ($\beta = -0.178$). Lastly, the independent variables trust and PSA, as well as both control variables, gender, and living area, showed no significant impact on an individual's ESG IINT, which supports the non-significant test results of the previously conducted two-tailed Mann-Whitney U test.

As a result, the following estimated regression equation was established:

$$y = 0.029 + 0.314 * x_1 + 0.344 * x_2 + 0.238 * x_3 + 0.224 * x_4 - .006 * x_5 + 0.053 * x_6 + 0.161 * x_7 - 0.192 * x_8 - 0.235 * x_9 + 0.002 * x_{10} + \varphi(1),$$

where y is IINT, x_1 is ATT, x_2 is SN, x_3 is PBC, x_4 is PCE, x_5 is trust, x_6 is PSA, x_7 is PFP, x_8 is PRI, x_9 is gender, x_{10} is the living area and φ is the random disturbance term.

Table 1. Coefficient table of the fourth model.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		95 % Confidence Interval for B		
		<i>B</i>	<i>Std. Error</i>	β	<i>t</i>	<i>p.</i>	Lower Bound	Upper Bound
4	(Constant)	.029	.592		.048	.962	-1.145	1.202
	ATT	.314	.107	.239	2.924	.004	.101	.526
	SN	.344	.095	.272	3.630	<.001	.156	.531
	PBC	.238	.061	.285	3.912	<.001	.117	.358
	PCE	.224	.087	.212	2.564	.012	.051	.398
	Trust	-.006	.090	-.005	-.062	.951	-.184	.173
	PSA	.053	.093	.045	.572	.568	-.131	.237
	PFP	.161	.064	.179	2.516	.013	.034	.289
	PRI	-.192	.080	-.178	-2.405	.018	-.350	-.034
	Gender ^b	-.235	.121	-.148	-1.943	.054	-.475	.005
	Living area ^c	.002	.116	.001	.021	.983	-.227	.232

Note. Number of studies = 128. *B* represents unstandardized regression weights; β indicates the standardized regression weights; ^a Dependent Variable: IINT. ^b 1 = female, 2 = male. ^c 1 = rural, 2 = urban

Source: own elaboration

6. RESULTS AND DISCUSSION

This study hypothesized that Gen Z's ESG IINT are influenced by 3 different constructs: the behavioral construct comprising variables of the TPB (regression model 1), the social construct involving three types of pro-social factors (regression model 2), and the financial construct comprising two variables concerning risk and return (regression model 3). While all constructs were found to be statistically significant, the findings of this research showed that the behavioral model had the greatest impact on Gen Z's ESG IINT. Exhibiting the best fit ($R^2 = 40.9\%$) among the three independent constructs examined, it was demonstrated that the TPB construct explains a substantial portion of the variation in Gen Z's SR IINT and thus, is a significant predictor of their investment behavior in this context. This finding aligns with previous research conducted by Armitage and Conner (2001) and Akhtar and Das (2018), emphasizing the importance of considering behavioral factors when studying ESG IINT. Furthermore, the SEE construct and the financial construct also contribute to explaining variability in IINT, although to a weaker extent. While the SEE model demonstrated the second strongest fit ($R^2 = 22.8\%$), the financial construct showed the weakest influence, explaining only 5.5% of the variability. Hence, consistent with prior research, these findings underscore the complexity of explaining

IINT among impact investors, which goes beyond traditional goals of maximizing wealth (Apostolakis et al., 2018; Beal & Goyen, 1998; Gutsche et al., 2018; Jansson & Biel, 2011; Jensen et al., 2016; Nilsson, 2008; Webley et al., 2001). Accordingly, it can be inferred that Gen Z's decisions regarding ESG funds are influenced not only by financial factors but also, to a much greater extent, by pro-social and behavioral considerations.

As indicated before, for a more detailed analysis of the relative explanatory power of each of the variables as well as for hypothesis testing, the combined construct, model 4, was considered. The inclusion of all variables examined resulted in a substantial increase in the R^2 value, indicating improved explanatory power of the model ($R^2 = 44.9\%$) and thus a more accurate picture of the factors influencing ESG IINT. In addition, the inclusion of a broad range of explanatory variables also mitigates the risk of omitted variable bias which usually results in a violation of the exogeneity assumption and consequently biases the regression results (Wilms et al., 2021).

Hence, starting with the behavioral variables, this study found that all of the factors of the TPB model, ATT, SN, and PBC, significantly predicted the dependent variable, IINT. Thus, hypotheses *H1a*, *H1b*, and *H1c* were supported. In model 4, it was observed that PBC emerged as the most influential predictor of Gen Z's IINT (table 1). This finding demonstrates that the perceived ease of engaging in ESG investing is the most important factor influencing Gen Z's intentions to invest in sustainable funds. Put another way, the study reveals that Gen Z investors' motivation to participate in SRI is strongly influenced by their perception of the absence of significant barriers or constraints to their engagement. These findings are in line with previous research outcomes that equally demonstrated the strong influence of PBC within the context of conventional investing (Akhtar & Das, 2018; Alleyne & Broome, 2011; Mahardhika & Zakiyah, 2020; Phan & Zhou, 2014) and ESG investing (Adam & Shauki, 2014; Apostolakis et al., 2018; Gamel et al., 2022; Jensen et al., 2016; Thanki et al., 2022). Particularly noteworthy is the consistency of the results between this study and Jensen et al.'s (2016) research. Their study focused on the SR IINT of the preceding generation, Gen Y, and found that PBC was the most powerful factor impacting Gen Y's IINT within the context of SRR. This congruence in findings across different generational cohorts reinforces the importance of PBC as a significant predictor of young investors' intentions to engage in ESG investing.

In addition, previous researchers have attempted to find possible explanations for why PBC is an important factor associated with conventional and SR IINT. Within the research of Akhtar and Das (2018), PBC was defined as “self-efficacy”, describing the “belief in one's capability to achieve certain financial goals” (p. 100). PBC, or self-efficacy, is believed to positively affect individuals' confidence in achieving desired behavioral outcomes, thus increasing motivation to engage in such behavior (Stajkovic & Luthans, 1998). Greater confidence in one's abilities may be particularly important for young and inexperienced investors, explaining the strong predictive power of PBC within cohort Z observed in this study. Furthermore, the strong predictive power of PBC may be attributed to the fact that Gen Z has grown up in the digital age, in which easy access to resources and the constant availability of information is perceived as the norm. This socio-cultural context may have shaped the expectations and preferences of

Gen Z investors, leading them to consider ease of access to information as an important factor in their decision-making process which also applied to the context of ESG investing (Francis & Hoefel, 2018).

Further, this study found that SN had the second strongest impact on Gen Z's ESG IINT (table 1). This indicates that cohort Z is strongly influenced by the opinions of individuals in their immediate social environment, including family and friends when considering SRI. Previous research findings made the same observation (Adam & Shauki, 2014; Apostolakis et al., 2018; Gamel et al., 2022; Gutsche et al., 2018; Hofmann et al., 2008; Jensen et al., 2016; Thanki et al., 2022; Mahardhika & Zakiyah, 2020), although several of these scholars identified SN rather as a weak predictor of behavioral IINT (Akhtar & Das, 2018, Ali, 2011; Armitage & Conner, 2001). In Gen Z, however, SN showed a comparably strong influence on IINT, almost similar to the predictive power of PBC. Therefore, arguments stating that people are uncomfortable discussing financial matters with others (Hofmann et al., 2008) could not be supported. Instead, following the arguments of scholars in the green consumer behavior literature (Vermeir & Verbeke, 2008), this study suggests that individuals who are less confident about the characteristics of a certain product, such as Gen Z regarding ESG funds, rely on social processors attached to subjective and social norms. Hence, this study argues that the reason why others' opinions have a strong influence on Gen Z's ESG IINT is because they have limited experience in investing and are not very familiar with SR products. This is supported by the low mean score of knowledge (Annex C.1), indicating a general lack of knowledge among Gen Z regarding SR products and sustainable investing practices, which leads them to rely on the opinions of others for guidance and information about SRI (Apostolakis et al., 2018). Another plausible explanation for the substantial predictive power of SN on ESG IINT is Gen Z's status as digital natives. As Casalegno et al., (2022) argue, cohort Z has grown up with digital technology, prompting them to seek guidance from sources such as social media platforms, peers, and online influencers. This reliance on outside sources emphasizes the importance of SN in influencing the behavioral intentions of Gen Z, which likely applies to ESG IINT as well.

The third behavioral variable, ATT, also demonstrated a significant influence on Gen Z's ESG IINT (table 1). These findings are consistent with previous research in the TPB literature on SR IINT, confirming that individuals with a positive perception of SRI are more likely to invest in such funds (Adam & Shauki, 2014; Apostolakis et al., 2018; Hofmann et al., 2008; Mahardhika & Zakiyah, 2020; Mehta et al., 2021; Thanki et al., 2022). However, one notable finding is that, unlike previous studies that have consistently identified ATT as the strongest predictor (Adam & Shauki, 2014, Apostolakis et al., 2018, Akhtar & Das, 2018), the results of this study do not demonstrate the same level of prominence for ATT in predicting ESG IINT. ATT proved to be the least strong predictor of the TPB construct. An explanation for this inconsistency could be that the concept of ATT towards ESG funds may encompass and measure different elements depending on the respondents and their individual perspectives (Jensen et al., 2016). This means that different people will have different ideas and interpretations of what constitutes a good or favorable ATT towards ESG funds. As Casalegno et al., (2022) point out, personal values, views, knowledge, and experiences, including those from different generations, can impact an

individual's viewpoint and contribute to the divergence in evaluating such. Further, Ajzen (1991) has discussed the varying importance of the three core variables (ATT, SN, PBC) in predicting intention, noting that their relative importance can differ across behaviors and situations.

Upon further examination of the variables that make up the construct SEE, the results of this study show that only PCE exhibited a significant effect on IINT, while PSA and trust were revealed to be nonsignificant (table 1). Consequently, while *H3a* and *H3c* were rejected, the study identified PCE as the fourth strongest predictor, supporting *H3b*. Strong PCE in the context of SRI implies that Gen Z individuals who hold the belief that their investment decisions can contribute to a better future demonstrate higher IINT in ESG funds compared to those who do not share this belief (Jensen et al., 2016). The findings are in line with the results of previous studies that have also identified a positive relationship between PCE and IINT in the context of SR funds (Apostolakis et al., 2018; Jensen et al., 2016; Nilsson, 2008; Wins & Zwergel, 2016). Nilsson (2008) describes the observed relationship as an "obvious conclusion" (p. 320) because people who engage in pro-social behavior inherently expect that their behavior will have an intended positive outcome. However, this study suggests that there may be additional reasons behind this occurrence related to Gen Z's socio-economic background. According to Casalegno et al., (2022), Gen Z was born in a turbulent world, which has resulted in individuals' increased sensitivity to environmental and social matters. It is therefore reasonable to assume that Gen Z's ESG IINT are influenced by the cohort's desire to make a positive impact on the world, combating social and environmental problems. Consequently, their SR IINT are likely to be stronger when they believe that their intended outcomes can be achieved. Kautish and Sharma (2020), Ng and Law (2015), N. Sharma and Dayal (2017) provided the same explanation for their observation in the area of green purchasing behavior of cohort Z, where individuals' PCE had a significant impact on their intentions to purchase green products.

As previously indicated, the second variable of the SEE construct, PSA, was shown to have no significant influence on Gen Z's ENG IINT (table 1). This finding contradicts prior studies in which PSA and individuals' green attitudes were shown to significantly predict their intentions to invest in SR funds (Owen & Qian, 2008; Williams, 2005; Nilsson, 2008). It has been argued that individuals who are concerned about social issues tend to extend their behavior to their portfolio strategies (Jonwall et al., 2022). This study, however, demonstrates that for Gen Z other factors play a more influential role in shaping their engagement in SR funds. A plausible reason why this study could not find any significant relationship might be the "attitude-behavior" gap as suggested by Boulstridge and Carrigan (2000). The "attitude-behavior" gap refers to the disparity between people's attitudes and their actual intentions or actions. It highlights the inconsistency between what people say or believe and what they ultimately intend to do. Accordingly, although survey participants rated their PSA as relatively high (Annex C.1), it appears that these traits do not automatically translate into sustainable IINT. This divergence between values and actions can be attributed to the presence of social desirability bias, which describes the propensity to over-report socially desirable qualities and behaviors while not consistently displaying them (Getzner & Grabner-Kräuter, 2004; Nilsson, 2009). The social

desirability bias is a well-established psychological concept that has been extensively discussed in the literature on green purchasing behavior and within the investment context, and it has proven challenging to mitigate (Nilsson, 2008). Lastly, similar to the concept of ATT, the variable PSA may encompass and measure different elements depending on the respondents and their individual perspectives, leading to a distorted representation of the PSA dimensions (Jensen et al., 2016).

Lastly, trust was also not found to be a significant predictor of Gen Z's ESG IINT (table 1), which aligns with Nilsson's (2008) earlier research that introduced trust as a potential factor in SR IINT but did not establish a significant relationship between the two variables. Consequently, this study suggests that trust does not play a crucial role in Gen Z's financial decision-making within the context of SRI. Contrary, the mean score of 3.18 on the trust-related survey questions (Annex C.1) indicates that Gen Z is undecided about whether to trust the pro-social claims made by providers of ESG mutual funds. This reluctance could be attributed to Krahn and Galambos' (2014) observation that Gen Z exhibits a healthy level of skepticism towards companies, prioritizing transparency and interactive communication with them more than any previous generation. Hence, it is important to note that while trust and consumer confidence have been consistently identified as influential factors in pro-social consumer purchase decisions (Albayrak et al., 2011; Crane, 2000; A. P. Sharma, 2021), this study demonstrates that these findings cannot be directly applied to Gen Z's ESG IINT.

With respect to the financial construct of this analysis, examination of the beta weights of model 4 reveals that both PRI and PFP exerted a significant influence on the dependent variable (table 1). Thus, it was concluded that Gen Z's ESG IINT are influenced by their assumptions about expected financial return and risk perceptions. Regarding the latter, study results suggest a significant negative relationship between subjective risk perceptions and Gen Z's ESG IINT, which provides support for *H2b*. Hence, it can be concluded that Gen Z individuals who perceive ESG funds as riskier than conventional funds exhibit lower intentions to invest in them compared to those who perceive SR funds as equally risky or less risky than traditional financial products. These findings are in line with traditional investment theory (Markowitz, 1968) and are supported by previous research conducted by scholars such as Gutsche et al. (2018) and L. Nguyen et al. (2019). However, a notable finding was that PRI had a significant impact on ESG IINT only in model 4, while the variable had no significant impact on IINT in model 3. This indicates that there is omitted variable bias in model 3, implying that this model fails to account for explanatory variables that influence both the dependent and independent variables. This observation aligns with the arguments put forth by Beal et al. (2005) and Diamantopoulos et al. (2003), emphasizing that a single construct alone is inadequate for a comprehensive understanding of intention and behavior.

Furthermore, a negative relationship between PRI and IINT conflicts with the general assumption that Gen Z represents a cohort that is less risk averse than previous generations (Wolff-Mann, 2020), which argues for a higher risk tolerance also in the area of financial investment decisions. Following the arguments of Himanshu et al. (2021), it is plausible to assume that recent global events such as the COVID-19 pandemic have had a significant impact

on risk perception and sense of security among young individuals, which consequently may also influence their investment behavior. Additionally, it can be argued that inexperienced investors, in general, display a greater aversion to risk, which may result in lower intentions to invest in funds perceived as riskier (Saivasan & Lokhande, 2022). This notion goes hand in hand with the research findings of Lewis and Mackenzie (2000) who emphasize that impact investors, similar to conventional investors, tend to maintain a diversified portfolio consisting of both ESG and conventional funds as a strategy to mitigate risk.

Concerning the second variable of the financial construct, PFP, the results of this study demonstrate a significant positive impact of the independent variable PFP on IINT (table 1). This indicates that individuals of Gen Z who consider ESG funds to perform financially better than conventional ones have stronger intentions to invest in them. Thus, *H2a* was supported. Previous research findings align with this observation, suggesting that impact investors, like conventional investors, also consider financial returns as a significant factor in their SRI investment decisions (Getzner & Grabner-Kräuter, 2004; Jansson & Biel, 2011; Nilsson, 2009; Riedl & Smeets, 2017; Rosen et al., 1991; Thanki et al., 2022). Therefore, this study argues that while Gen Z is known for being altruistic and caring about social and environmental issues, the social rewards and altruistic feelings resulting from investing in ESG funds are not enough to fully understand their financial IINT. Instead, by considering financial returns and risk estimates, although to a smaller extent, it can be inferred that Gen Z also follows the principles of traditional investment theory in their decision-making. However, it must be acknowledged that the low beta weights of PFP and PRI show that these factors have a less dominant influence on Gen Z's IINT.

Overall, this study affirms the findings of Beal et al. (2005), Lewis and Mackenzie (2000), and Pérez-Gladish et al. (2012) suggesting that impact investors constitute a heterogeneous group of investors who hold different beliefs regarding the importance of financial returns. Generational differences appear to contribute to this heterogeneity. Applying Nilsson's (2009) segmentation approach, Gen Z could be categorized as "socially responsible and return driven" impact investors who consider both factors, financial return and social responsibility, when making decisions to invest in ESG funds.

Lastly, this study hypothesized that Gen Z's ESG IINT would differ based on the socio-demographic variables of age and living area. However, the non-significant Mann-Whitney U tests revealed no significant differences between the two groups, leading to the rejection of hypotheses *H4a* and *H4b*. This finding contradicts the results of several researchers (Beal & Goyen, 1998; Rosen et al., 1991; Tippet & Leung, 2001) suggesting that female impact investors are more inclined toward ESG investing than their male counterparts. The same lack of significance was observed for the variable living area, indicating that whether individuals reside in rural or urban areas does not influence SR IINT. Therefore, the claim made by Beal and Goyen (1998) that SRI is more relevant to residents of larger cities is not supported. Furthermore, both gender and living area were included as control variables in all regression analyses. Except for gender within the TPB construct, none of these variables exhibited

significant results in any of the models. Considering that only model 4 is considered for the analysis of the influential factors of the independent variables, the non-significant results for gender and living area (table 1) align with the findings of the previously conducted Mann-Whitney U test.

7. IMPLICATIONS AND CONCLUSION

As society continues to evolve, the investment landscape is witnessing a significant shift driven by the needs, concerns, and priorities of younger generation investors, particularly Gen Z, who are currently entering the investment market. The purpose of this study was to explore the factors that influence their intention to invest in ESG funds and to identify the most influential drivers in order to provide guidance to companies, investment managers, financial advisors and policymakers on how to tailor their financial products to attract and engage with Gen Z investors accordingly.

Drawing from the results of an expanded TPB model, ATT, SN, PBC, PCE, and PFP positively affected IINT, whereas PRI adversely influenced it. Furthermore, neither PSA nor trust were statistically significant, therefore no firm conclusions could be formed about their relationship with IINT. Nonetheless, these data show that Gen Z's ESG IINT are not solely motivated by profit maximization. Instead, behavioral issues, as well as social and environmental concerns, have an impact on the prospective future SR investors.

A key finding of this research was that perceived ease of investing had the strongest influence on Gen Z's motivation to engage in SRI. Having grown up in the digital world, the constant availability of information has shaped the expectations and preferences of Gen Z investors (Francis & Hoefel, 2018). Accordingly, companies and financial institutions should recognize the importance of easy access to information and design financial products and services with a user-friendly interface that provides Gen Z investors with seamless access to relevant information and market data on ESG funds. Moreover, the notable deviations in mean scores for IINT and PBC (Annex C.1) indicate that although Gen Z exhibits a significant interest in ESG investment overall, there are individuals who perceive a lack of understanding and control over SRI. As a result, it may be advantageous for SR fund providers to promote where and how investors can reliably invest in ESG funds and what benefits ESG investments may entail. Increasing awareness and knowledge about SR funds and their characteristics compared to traditional investments appears to be critical to attracting future Gen Z investors interested in sustainable and responsible investing. By addressing these factors, SR fund providers may effectively engage and foster a rising pool of young people who want to match their investments with their beliefs but do not yet feel sufficiently informed to do so. In addition, policymakers and public institutions could also intervene. Since Gen Z investors are young and on average inexperienced, companies and financial advisors, as well as schools and universities, should offer educational tools and advice tailored to their specific needs. Financial literacy, investment techniques, and risk management could be delivered through educational materials, webinars, and interactive technologies. These materials could help cohort Z increase their knowledge of

SRI, leading to a potential increase in self-confidence and thus "self-efficacy" as described by Nilsson (2008).

Furthermore, this research showed that Gen Z is strongly influenced by the opinions of their close social network, including family members and friends. If they hold a favourable opinion about ESG funds or believe it is a wise idea to invest in them, Gen Z feels more inclined to engage in SRI. Consequently, it would be advisable for companies, investment managers, and financial advisors to adopt peer recommendation strategies when promoting SR financial products, such as including testimonials from current ESG investors in marketing and communications materials. By showcasing the positive experiences of Gen Z's social circle, financial institutions can build trust and credibility, which may increase the likelihood of attracting and engaging more Gen Z investors in ESG funds. In addition, peer endorsements could also be fostered through online forums, social media groups, or educational events sponsored by ESG fund providers in order to promote open discourse and knowledge sharing about ESG funds. As information would be disseminated through interpersonal networks, such initiatives would increase Gen Z's knowledge and familiarity with sustainable investing, as well as their trust in ESG fund providers. While the predictive power of trust on ESG IINT was not found to be statistically significant in this study, the results still suggest that Gen Z's overall confidence in ESG fund providers is uncertain (Annex H.7). Lastly, because cohort Z relies on digital technology and external information sources in their everyday lives, SR fund providers should recognize the importance of digital channels and social media networks to reach and engage this demographic. Companies, investment managers, and financial advisors may effectively capture the attention and interest of cohort Z by meeting them on their chosen digital channels through people (influencers) they trust.

Another important finding of this study is the significant impact of Gen Z's ATT on ESG funds, and their perception of the impact created by investing accordingly. As such, the study recommends ESG fund providers capitalize on these insights by actively promoting the positive societal and environmental outcomes associated with their ESG funds. Specifically, it would be prudent for companies, investment managers, and financial advisors to communicate how investing in SR funds aligns with Gen Z's desire to address social and environmental challenges by highlighting the potential impact of their investment choices. This also applies to policymakers, who should provide comprehensive information about ESG funds, their social and environmental benefits, and how Gen Z's investment decisions can contribute to positive change.

On the other hand, this study also revealed that despite Gen Z's pro-social and pro-environmental orientation, the financial factors of perceived risk and return also play a role in the cohort's IINT. It was found that Gen Z is more inclined to invest in SR funds if they perceive the risk to be lower and the financial performance to be higher than conventional funds. Consequently, this study suggests that SR fund providers should also consider the financial aspect when promoting their financial products. Addressing both, the social and financial aspects when communicating with Gen Z investors, companies and investment managers can

provide a more comprehensive understanding of the potential benefits of ESG funds to Gen Z. Given their lack of experience in investing in general, providing clear information about the expected returns and removing any misconceptions about the risks associated with ESG investing could strengthen Gen Z's positive ATT and thus their interest in these funds. However, it should be noted that perceived risk and return had only a minor impact on Gen Z's IINT, so ESG fund providers should only pay a conscience amount of attention to these factors.

Finally, the fact that socio-demographic indicators were not significant in this study calls into question SR fund providers' segmentation techniques. While they may be useful for marketing efforts, this study argues that a more flexible and personalized strategy based on generational affiliation and personal views is preferable.

In conclusion, the findings of this study offer valuable insights for companies managing sustainability funds, enabling them to effectively customize their financial products, marketing strategies, and acquisition approaches to align with the preferences and needs of Gen Z. Notably, the study highlights the significant interest displayed by Gen Z in ESG investing, as indicated by their high intentions to invest in ESG funds. This emphasizes the immense potential presented by the growing number of Gen Z investors, potentially leading to a gradual transformation of the investment market towards a stronger focus on SRI. By addressing a research gap and specifically exploring the IINT of Gen Z in relation to sustainable funds, this study contributes to the existing literature and provides crucial insights into the key factors influencing the motivation of young potential ESG investors and the relative importance of these factors. These findings serve as a valuable resource for both practitioners and policymakers seeking to effectively engage and adapt to Gen Z's investment preferences.

8. LIMITATIONS AND FUTURE RESEARCH

As with any research, several limitations must be considered with the results of this study. First, it should be noted that the sample size of the study was small compared to previous studies. For this reason, it may be difficult to compare the results of the present research to studies with larger samples. Although the number of respondents was within the acceptable range established by Green (1991), it should be noted that a larger sample size would improve the statistical power of the results. Consequently, it would be advisable to investigate the same causalities with a larger number of respondents in future studies in order to validate the results of the present research and obtain even more accurate results.

Furthermore, the sample showed a considerable gender imbalance and educational bias. With 59.4% of respondents being female, the sample was overrepresented by respondents identifying as women. The literature suggests that different gender groups may have different perspectives on, or a different relationship to, SRI due to prior experiences (Schueth, 2003). Therefore, it is important to acknowledge that the results may not fully capture the diversity of gender identities as SRI is perceived differently by women and men.

Regarding education, it should be noted that individuals with higher educational backgrounds are also overrepresented in the sample population. Since the survey was primarily distributed through the author's social and professional network, as well as through the Copenhagen Business School's email distribution list, it mainly reached individuals with a university degree. This contradicts the idea of random sampling, where all types of individuals should have an equal or unequal probability of being included in the study population (Dumicic, 2011). Because the method of distribution biased the individuals reached, the targeted individuals may not be representative of the total population, limiting the external validity of the study. Hence, it would be advisable for future studies to cover a broader pool of respondents with different educational backgrounds.

Another limitation of this study is the measurement of the variable PSA, as the limited number of questions assessing PSA within the survey may have skewed the actual strength of participants' pro-social attitudes. As previously indicated, PSA may encompass and measure different elements depending on the respondents and their individual perspectives potentially leading to a distorted representation of PSA (Jensen et al., 2016). For this reason, future research should employ a more extensive and elaborate examination of the PSA dimension by utilizing a longer, comprehensive questionnaire. By doing so, researchers can obtain a more accurate understanding of participants' pro-social attitudes.

To this end, the presence of social desirability bias poses another limitation. Individuals with social desirability bias respond in ways that they consider to be socially acceptable or desired, rather than delivering honest or truthful replies. This bias can skew the results and undermine the findings' validity (Getzner & Grabner-Kräuter, 2004; Nilsson, 2009). Consequently, this study suggests that researchers use indirect or implicit measures instead of self-reports in future studies to reduce the potential influence of social desirability.

Furthermore, one of the study's key shortcomings is that it only measures Gen Zs' investing intentions rather than their actual investment activity. Although earlier study has demonstrated that intention is the most significant factor for the progression of actual behavior (Ajzen, 1985), future research should incorporate measurement of the proposed relationship between intention and behavior to provide a more comprehensive understanding of investment decisions (Adam & Shauki, 2014; Alleyne & Broome, 2011; Akhtar & Das, 2018). In addition, it would be valuable to examine the percentage of participants' total portfolio that they would be willing to invest in ESG funds as opposed to conventional funds, as this would help to better understand the relationship between intention and actual behavior.

Finally, previous research has demonstrated that investment behavior, particularly in the context of SRI, is overly complex. While this study provides an introductory overview of the factors and their relative importance to Gen Z's ESG IINT, other variables could be explored for their importance. For instance, previous studies examined financial literacy (Akhtar & Das, 2018), political orientation (Gutsche et al., 2018), and religious faith (Jonwall et al., 2022) for their predictive power. In addition, future studies could consider the possible interrelationships

and interaction effects among these independent variables, exploring potential moderation and mediation effects. For example, it has been found that ATT is influenced by various other independent variables (Ali, 2011; Thanki et al., 2022). Investigating these complex relationships will offer a more comprehensive understanding. As a result, researchers can provide even more detailed guidance to ESG fund providers and policymakers.

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ANNEXES

Annex A Questionnaire

Part 1: Investing Knowledge

Item	
Question	Please indicate how you would rate your level of knowledge about financial assets and investments: (1) no knowledge (2) little knowledge (3) medium knowledge (4) strong knowledge (5) very strong knowledge
Question	In your lifetime, have you ever invested money into financial instruments such as stocks, mutual funds, or ETFs? <input type="checkbox"/> Yes <input type="checkbox"/> No
Question	Have you ever heard of ESG (Environmental, Social, and Governance) funds? <input type="checkbox"/> Yes <input type="checkbox"/> No
Description	Please read this brief definition of ESG funds: ESG funds, also known as sustainable or socially responsible funds, are investment funds that consider environmental, social, and governance (ESG) factors alongside financial metrics when selecting investments. These funds prioritize companies that have strong sustainability practices, social responsibility policies, and ethical leadership. Overall, ESG funds aim to generate positive social or environmental impact, whereas "ordinary" investment funds focus solely on financial metrics such as profitability, growth potential, and risk factors.
Question	Have you owned an ESG fund or any financial product that promotes social responsibility in the past or do you currently own one? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know

Part 2: Theory of Planned Behaviour

Construct	Item	Measurement	Reference
<i>Behavioural construct</i>			
Intention to Invest	IINT_1	If I had the opportunity, I would invest in ESG/ socially responsible funds.	Adapted from Buchan (2005)
	IINT_2	I may invest in ESG/ socially responsible funds in the future.	
	IINT_3	I have the intention to start or continue to invest in ESG/ socially responsible funds.	

Attitude	ATT_1	I believe that ESG funds are good.	Adapted from Buchan (2005) as outlined in Jensen et al. (2016)
	ATT_2	I believe that ESG funds are ethical.	
	ATT_3	I believe that investing in ESG funds is a wise decision.	
Subjective Norm	SN_1	People who are important to me think that investing in ESG funds is a good idea.	Adapted from East (1993) and Buchan (2005) as outlined in Jensen et al. (2016)
	SN_2	People who are important to me think that I should invest in ESG funds.	
	SN_3	People who are important to me think that investing in ESG funds would be a wise idea.	
Perceived behavioural control	PBC_1	If I want to invest in ESG funds I can easily do so.	Adapted from Alleyne and Broome (2011)
	PBC_2	I have the knowledge to invest in ESG funds.	
	PBC_3	There are plenty of opportunities for me to invest in ESG funds.	
<i>Social construct</i>			
Pro-social attitudes	PSA_1	Respect workplace rights (i.e., possibility to freely join trade unions).	Adapted from Nilsson (2008)
	PSA_2	Work actively with environmental issues (i.e., by reducing environmental effect of products and production).	
	PSA_3	Respect human rights (work against discrimination based on race, gender, or religion).	
	PSA_4	Do not produce goods that could harm people (i.e., weapons).	
	PSA_5	Do not use unethical business practices (i.e., bribery and corruption).	
Perceived consumer effectiveness	PCE_1	By investing in an ESG fund, I can have a positive impact on the environment.	Adapted from Nilsson (2008)
	PCE_2	I have the power to influence social problems by investing in ESG funds.	
	PCE_3	It does not matter if I invest my money in an ESG fund because one person alone cannot make a difference. (R)	
Trust	Trust_1	Providers of ESG mutual funds have no genuine interest in improving the environment since they, like every other company, primarily want to make a profit. (R)	Adapted from Nilsson (2008)
	Trust_2	I trust that providers of ESG mutual funds follow the socially responsible guidelines used and advertised in their marketing.	
	Trust_3	I trust that providers of ESG mutual funds are doing their best to get companies to act in ways that reduce social problems such as pollution and poverty in the developing world.	

<i>Financial construct</i>			
Perceived financial performance	PFP	a much lower rate of return a slightly lower rate of return a similar rate of return a slightly higher rate of return a much higher rate of return	Adopted from Lewis and Mackenzie's (2000)
Perceived financial risk	PRI	much riskier than “ordinary” investment funds a little riskier than “ordinary” investment funds about the same than “ordinary” investment funds a little less risky than “ordinary” investment funds a lot less risky than “ordinary” investment funds	Adopted from Lewis and Mackenzie's (2000)

Notes: All items (except of “perceived financial performance” and “perceived financial risk”) were measured on a 5-point Likert scale of 1 (strongly disagree) to 5 (strongly agree)
R = reverse-coded

Part 3: Demographic Questions

Measure	Type of data	Measurement scale
Gender	Qualitative, categorical	Female, male, diverse, other
Age	Quantitative, numerical	Open field
Nationality	Qualitative, categorical	Open field
Education	Qualitative, categorical	List of degrees
Employment	Qualitative, categorical	List of employment status
Study subject	Qualitative, categorical	Economics, other
Living area	Qualitative, categorical	Village (<1,000*), town (1,000 – 20,000*), large town (20,000 – 100,000*), city (100,000 – 300,000*), large city (300,000* <)

Annex B Socio-demographics and investing information

Item	<i>n</i>	%
Gender		
Female	76	59.4
Male	51	39.8
Non-binary	1	0.8
Age (in years)		
Less than 15	0	0
15 to 17	1	0.8
18 to 20	9	7.0
21 to 23	55	43.0
24 to 26	63	49.2
Highest degree		
No diploma (still in school)	2	1.6
High school diploma	18	14.1
Apprenticeship	0	0
Bachelor's degree	89	69.5
Master's degree	19	14.8
Study subject		
Business	76	59.4
Other	52	40.6
Employment status		
Pupil	2	1.6
Apprentice	0	0
University student	94	73.4
Employee	23	18.0
Self-employed	4	3.1
Unemployed	5	3.9
Area of residency		
Rural (< 100.000 inhabitants)	45	35.2
Urban (> 100.000 inhabitants)	83	64.8
Invested before		
Yes	67	52.3
No	61	47.7
Heard of ESG funds before		
Yes	74	57.8
No	54	42.2
Ever invested in ESG funds		
Yes	16	12.5
No	90	70.3
Not sure	22	17.2

Note. *N* = 128

Annex C Correlation Analyses

C.1 Descriptive Statistics

Statistics

	Knwl	IINT	ATT	SN	PBC	PCE	Trust	PSA	PFP	PRI
N	128	128	128	128	128	128	128	128	128	128
Mean	2.62	3.65	3.79	3.22	3.11	3.62	3.18	3.93	2.77	2.78

C.2 Tests of Normality

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IINT	.134	128	<.001	.949	128	<.001
ATT	.191	128	<.001	.921	128	<.001
SN	.235	128	<.001	.922	128	<.001
PBC	.150	128	<.001	.959	128	<.001
PCE	.194	128	<.001	.853	128	<.001
Trust	.147	128	<.001	.960	128	<.001
PSA	.163	128	<.001	.926	128	<.001

^a. Lilliefors Significance Correction

C.3 Spearman correlation coefficients

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. IINT	3.7	0.8	-								
2. ATT	3.8	0.6	.384**	-							
3. SN	3.2	0.6	.409**	.246**	-						
4. PBC	3.1	0.9	.311**	.116	.139	-					
5. PCE	3.6	0.8	.343**	.397**	.235**	-.063	-				
6. Trust	3.1	0.7	.269**	.426**	.226**	.076	.301**	-			
7. PSA	3.9	0.7	.157	.263**	.136	-.209*	.323**	.175*	-		
8. PFP	2.7	0.9	.183*	-.034	.214	.126	-.016	-.106	.042	-	
9. PRI	2.8	0.7	-.064	.169	.049	.133	-.004	-.018	.240**	.217*	-

Note. ** $p < .001$; * $p < .05$; $N = 128$

Annex D Group comparison

D.1 Mann-Whitney U test for gender

Variable	Mean Rank		<i>U</i>	<i>z</i>	<i>p</i>
	Female	Male			
IINT	66.55	60.2	1744	-.967	.333

Note. $N = 128$, $n(\text{female}) = 76$, $n(\text{male}) = 51$.

D.2 Mann-Whitney U test for living area

Variable	Mean Rank		<i>U</i>	<i>z</i>	<i>p</i>
	rural	urban			
IINT	64.41	64.55	1863.5	-.020	.984

Note. $N = 128$, $n(\text{rural}) = 45$, $n(\text{urban}) = 83$.

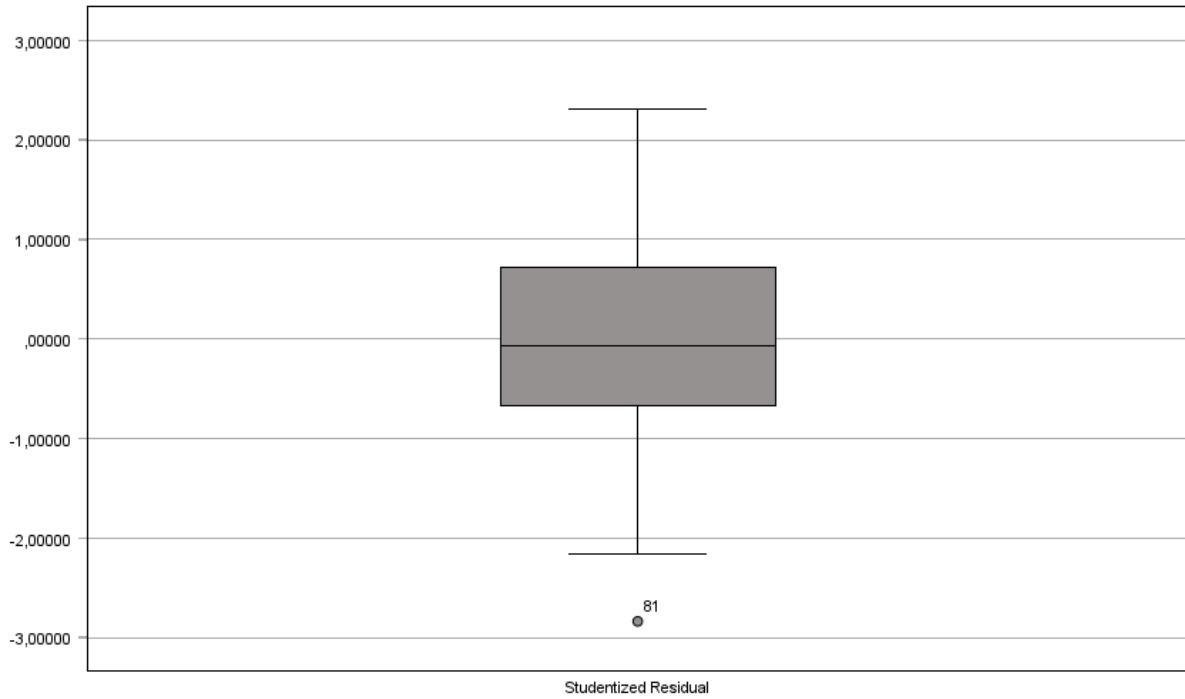
D.3 Mann-Whitney U test for study subject

Variable	Mean Rank		<i>U</i>	<i>z</i>	<i>p</i>
	business	other			
IINT	65.14	63.57	1927.5	-.239	.811

Note. $N = 128$, $n(\text{business}) = 76$, $n(\text{other}) = 52$.

Annex E Regression Analysis model 1

E.1 Outliers

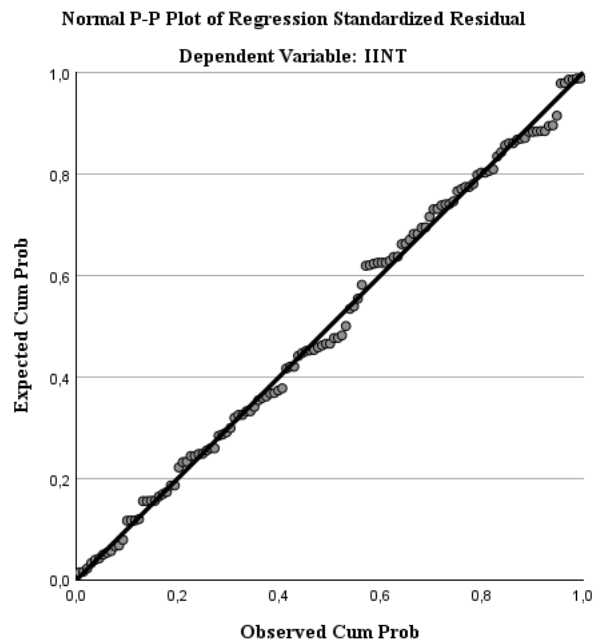
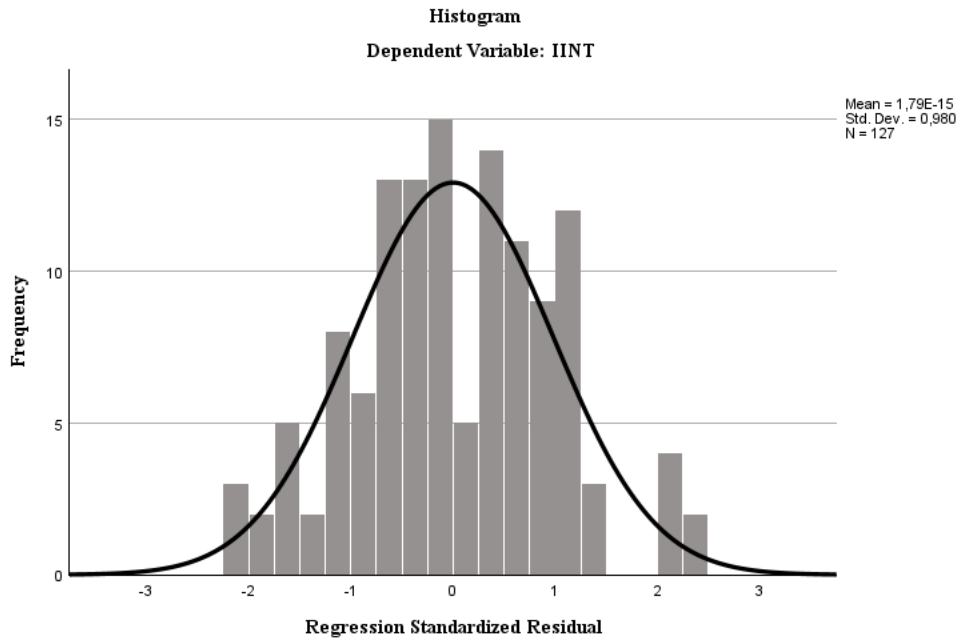


Casewise Diagnostics^a

Case Number	Std. Residual	IINT	Predicted Value	Residual
81	-2.800	2.00	3.7826	-1.78259

^a. Dependent Variable: IINT

E.2 Normality Assumption



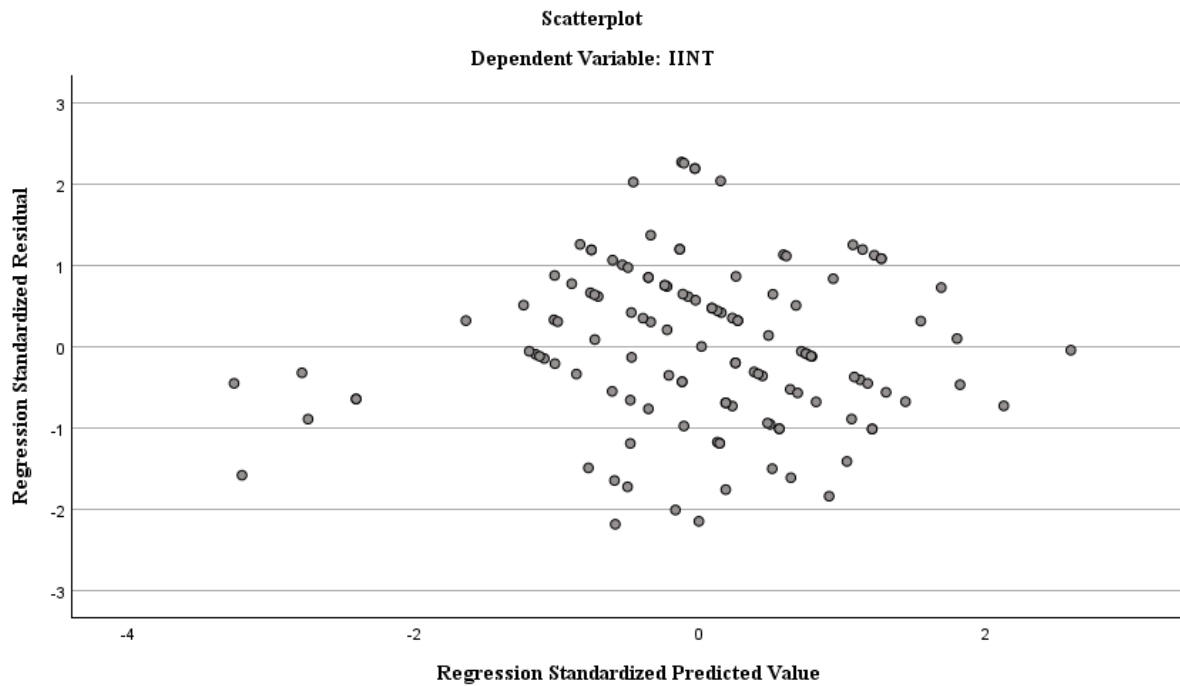
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Studentized Residual	.055	127	.200*	.987	127	.297

*. This is a lower bound of the true significance.

^a. Lilliefors Significance Correction

E.3 Homoscedasticity Assumption



Breusch-Pagan Test for Heteroskedasticity^{a,b,c}

Chi-Square	df	Sig.
.154	1	0.695

^a. Dependent variable: IINT

^b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables.

^c. Predicted values from design: Intercept + ATT + SN + PBC + Gender + Living area

E.4 No Multicollinearity Assumption

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	ATT	0.844	1.185
	SN	0.905	1.105
	PBC	0.869	1.151
	Gender	0.847	1.181
	Living area	0.987	1.014

^a. Dependent Variable: IINT

E.5 Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.656 ^a	0.430	0.406	0.61791	2.005

^a. Predictors: (Constant), Gender, Living area, ATT, SN, PBC

^b. Dependent Variable: IINT

E.6 F-Statistic

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.845	5	6.969	18.253	<0.001 ^b
	Residual	46.199	121	.382		
	Total	81.044	126			

^a. Dependent Variable: IINT

^b. Predictors: (Constant), Gender, Living area, ATT, SN, PBC

E.7 Coefficient Table

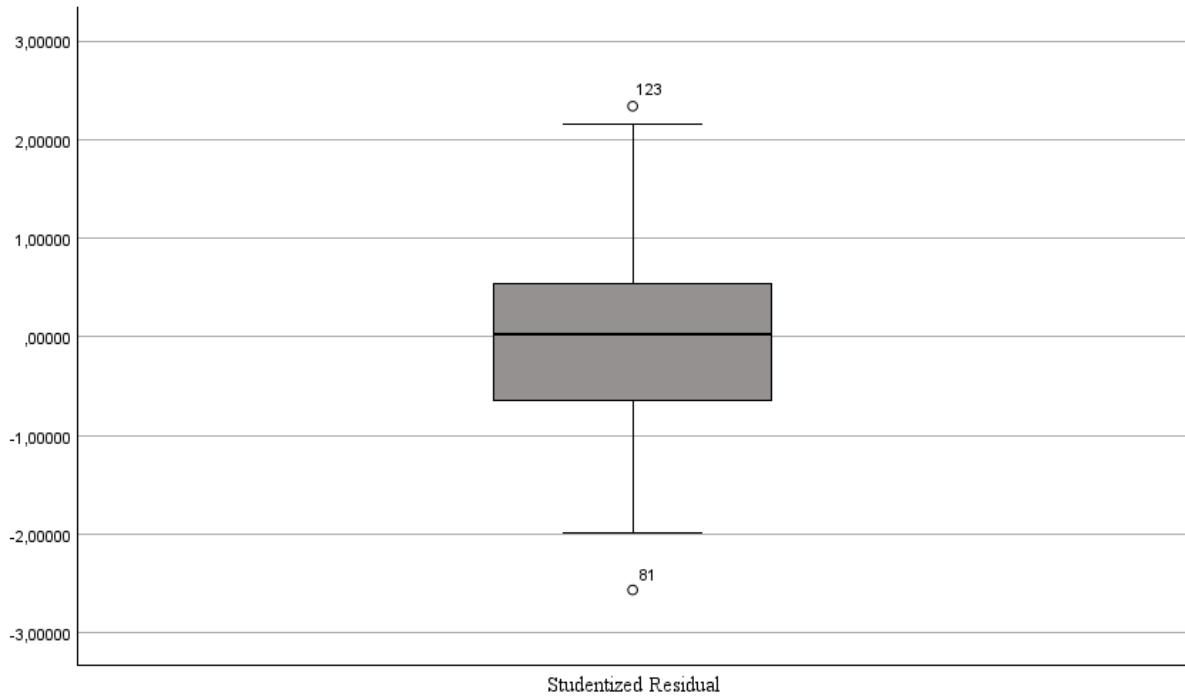
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>p</i>
		<i>B</i>	<i>Std. Error</i>	β		
1	(Constant)	.451	.495		.910	.364
	ATT	.384	.097	.297	3.974	<.001
	SN	.478	.090	.384	5.321	<.001
	PBC	.202	.060	.246	3.341	.001
	Gender ^b	-.282	.117	-.180	-2.408	.018
	Living area ^c	-.004	.116	-.002	-.032	.975

Note. Number of studies = 127. *B* represents unstandardized regression weights; β indicates the standardized regression weights; ^a Dependent Variable: IINT. ^b 1 = female, 2 = male. ^c 1 = rural, 2 = urban

Annex F Regression Analysis model 2

F.1 Outliers

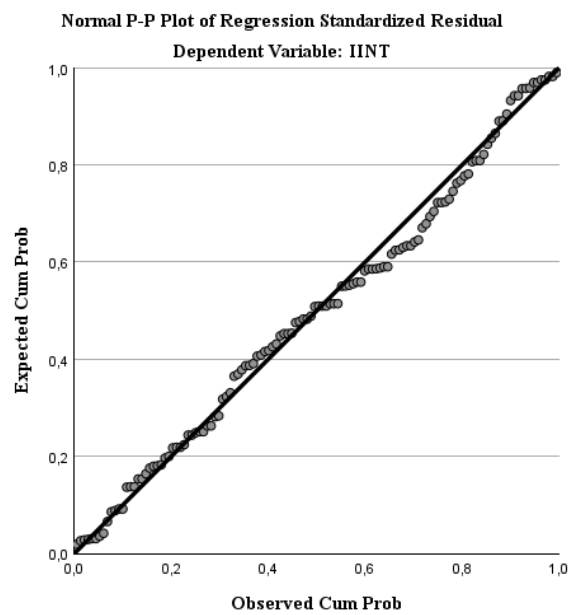
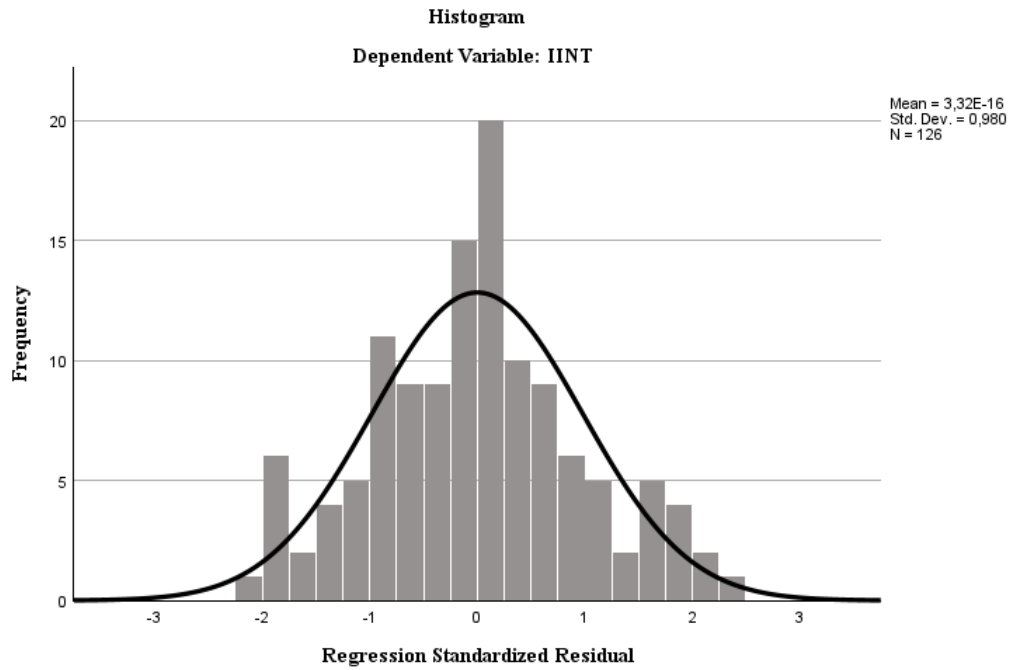


Casewise Diagnostics^a

Case Number	Std. Residual	IINT	Predicted Value	Residual
81	-2.529	2.00	3.8698	-1.86979
123	2.194	4.00	2.3778	1.62216

^a. Dependent Variable: IINT

F.2 Normality Assumption



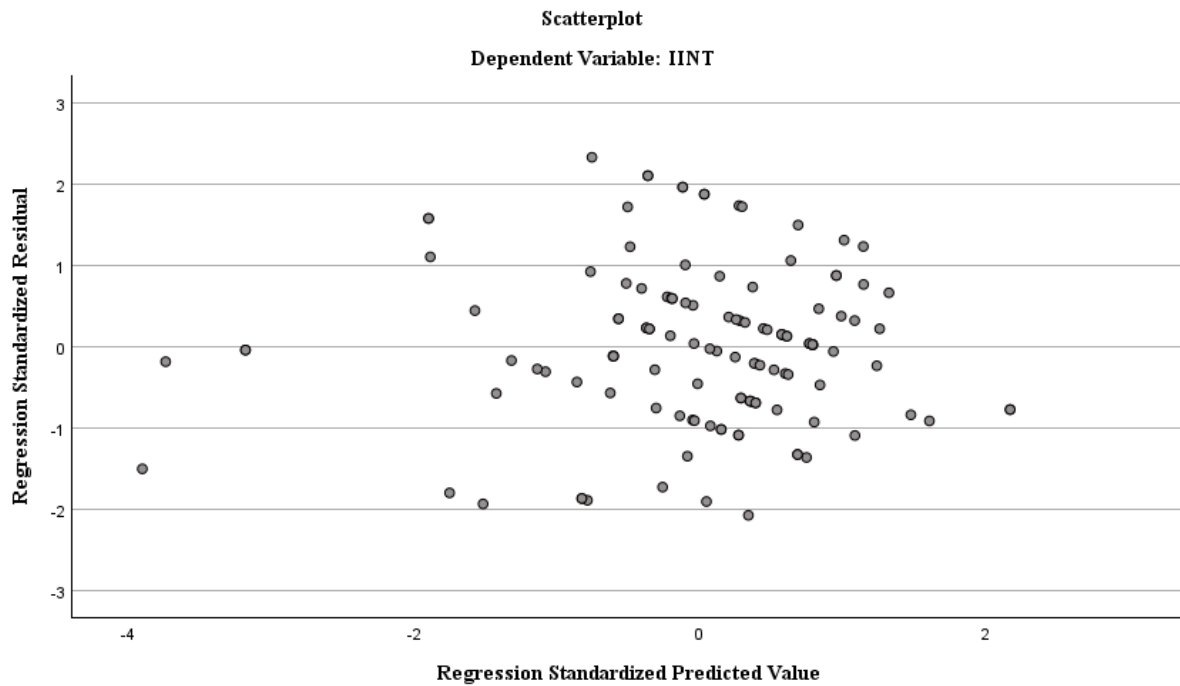
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Studentized Residual	.066	126	.200*	.984	126	.136

*. This is a lower bound of the true significance.

^a. Lilliefors Significance Correction

F.3 Homoscedasticity Assumption



Breusch-Pagan Test for Heteroskedasticity^{a,b,c}

Chi-Square	df	Sig.
3.723	1	0.054

^a. Dependent variable: IINT

^b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables.

^c. Predicted values from design: Intercept + PCE + Trust + PSA + Gender + Living area

F.4 No Multicollinearity Assumption

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
2	PCE	0.768	1.302
	Trust	0.857	1.167
	PSA	0.778	1.285
	Gender	0.840	1.190
	Living area	0.975	1.026

^a. Dependent Variable: IINT

F.5 Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	.509 ^a	.259	.228	.70712	2.091

^a. Predictors: (Constant), Gender, Living area, PSA, Trust, PCE

^b. Dependent Variable: IINT

F.6 F-Statistic

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	20.928	5	4.186	8.371	<.001 ^b
	Residual	60.003	120	.500		
	Total	80.931	125			

^a. Dependent Variable: IINT

^b. Predictors: (Constant), Gender, Living area, PSA, Trust, PCE

F.7 Coefficient Table

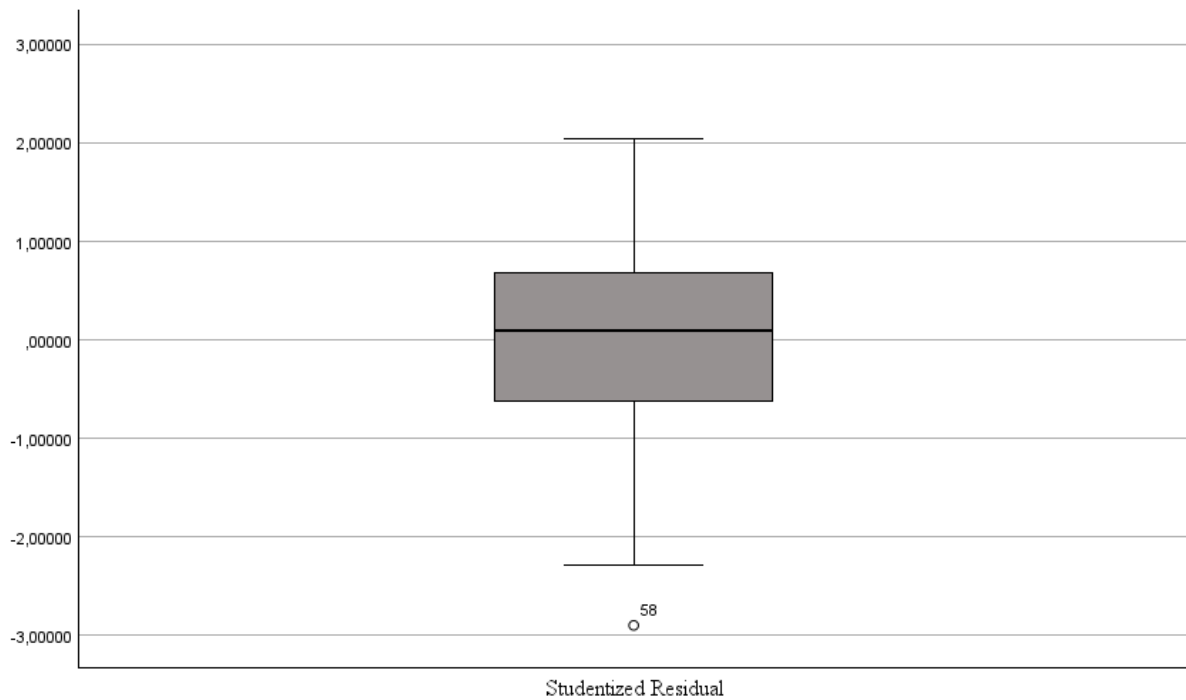
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>p</i>
		<i>B</i>	<i>Std. Error</i>	β		
1	(Constant)	1.639	.610		2.688	.008
	PCE	.443	.098	.405	4.519	<.001
	Trust	.184	.099	.159	1.867	.064
	PSA	.021	.103	.018	.201	.841
	Gender ^b	-.073	.135	-.046	-.536	.593
	Living area ^c	-.095	.134	-.057	-.712	.478

Note. Number of studies = 126. *B* represents unstandardized regression weights; β indicates the standardized regression weights; ^a Dependent Variable: IINT. ^b 1 = female, 2 = male. ^c 1 = rural, 2 = urban

Annex G Regression Analysis model 3

G.1 Outliers

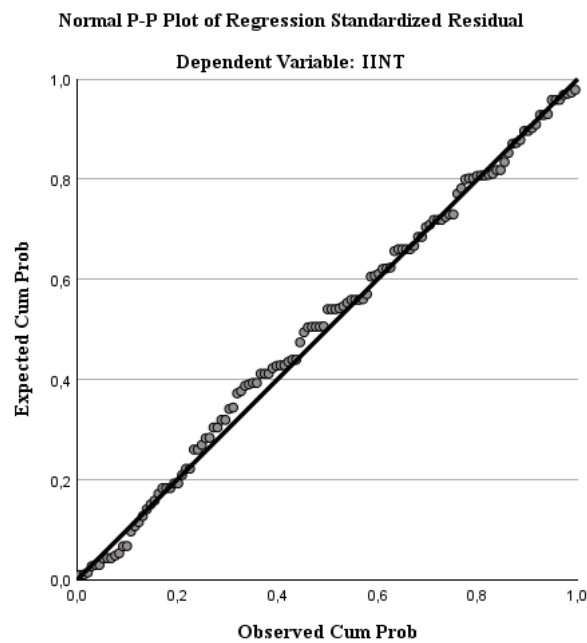
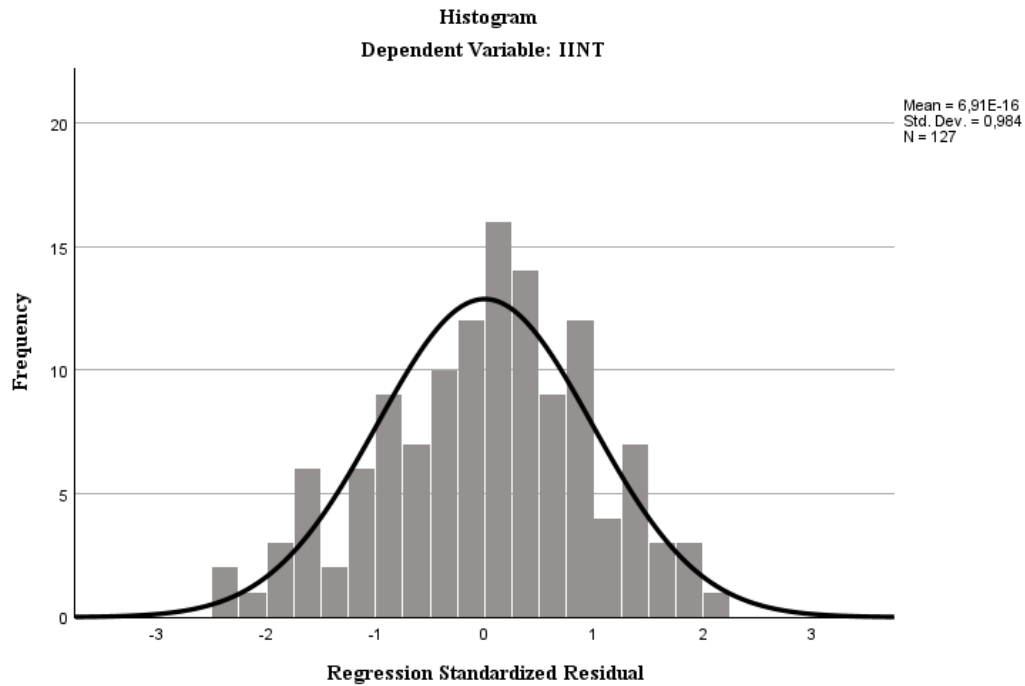


Casewise Diagnostics^a

Case Number	Std. Residual	IINT	Predicted Value	Residual
58	-2.858	1.00	3.2377	-2.23774

^a. Dependent Variable: IINT

G.2 Normality Assumption



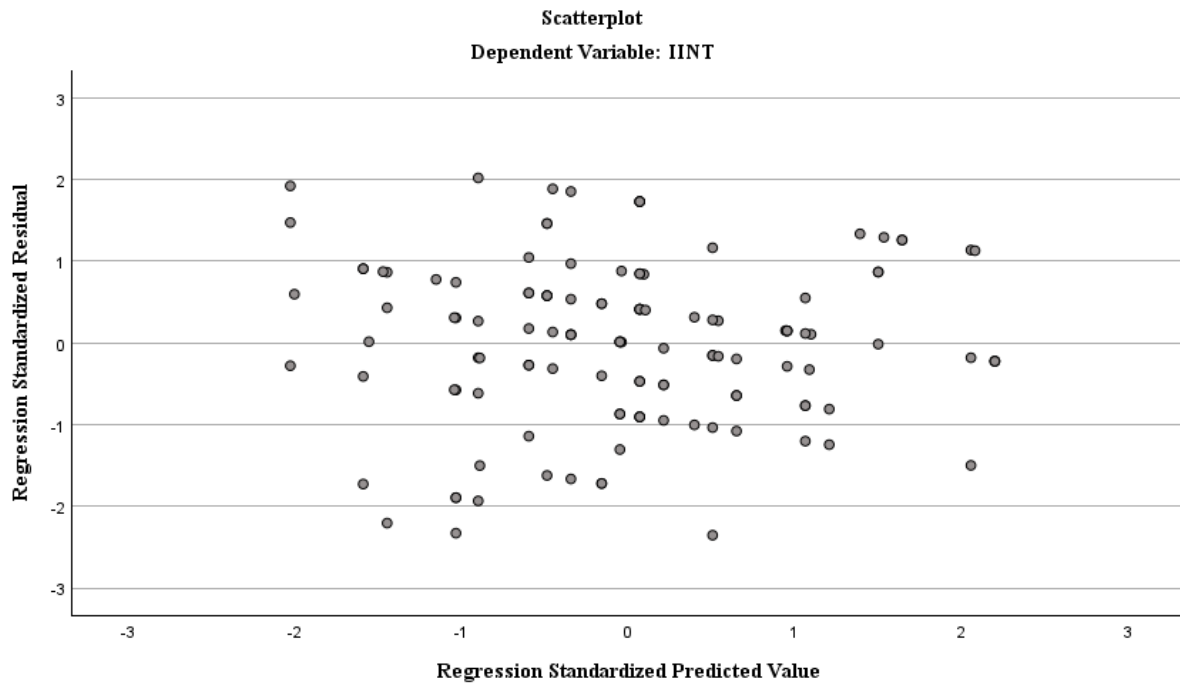
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Studentized Residual	.054	127	.200*	.987	127	.251

*. This is a lower bound of the true significance.

^a. Lilliefors Significance Correction

G.3 Homoscedasticity Assumption



Breusch-Pagan Test for Heteroskedasticity^{a,b,c}

Chi-Square	df	Sig.
3.830	1	0.050

^a. Dependent variable: IINT

^b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables.

^c. Predicted values from design: Intercept + PFP + PRI + Gender + Living area

G.4 No Multicollinearity Assumption

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
3	PFP	0.935	1.070
	PRI	0.928	1.078
	Gender	0.979	1.022
	Living area	0.978	1.022

^a. Dependent Variable: IINT

G.5 Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
3	.291 ^a	.085	.055	.75869	2.086

^a. Predictors: (Constant), Gender, Living area, PFP, PRI

^b. Dependent Variable: IINT

G.6 F-Statistic

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	6.484	4	1.621	2.816	.028 ^b
	Residual	70.225	122	.576		
	Total	76.708	126			

^a. Dependent Variable: IINT

^b. Predictors: (Constant), Gender, Living area, PFP, PRI

G.7 Coefficient Table

Parameter Estimates with Robust Standard Errors

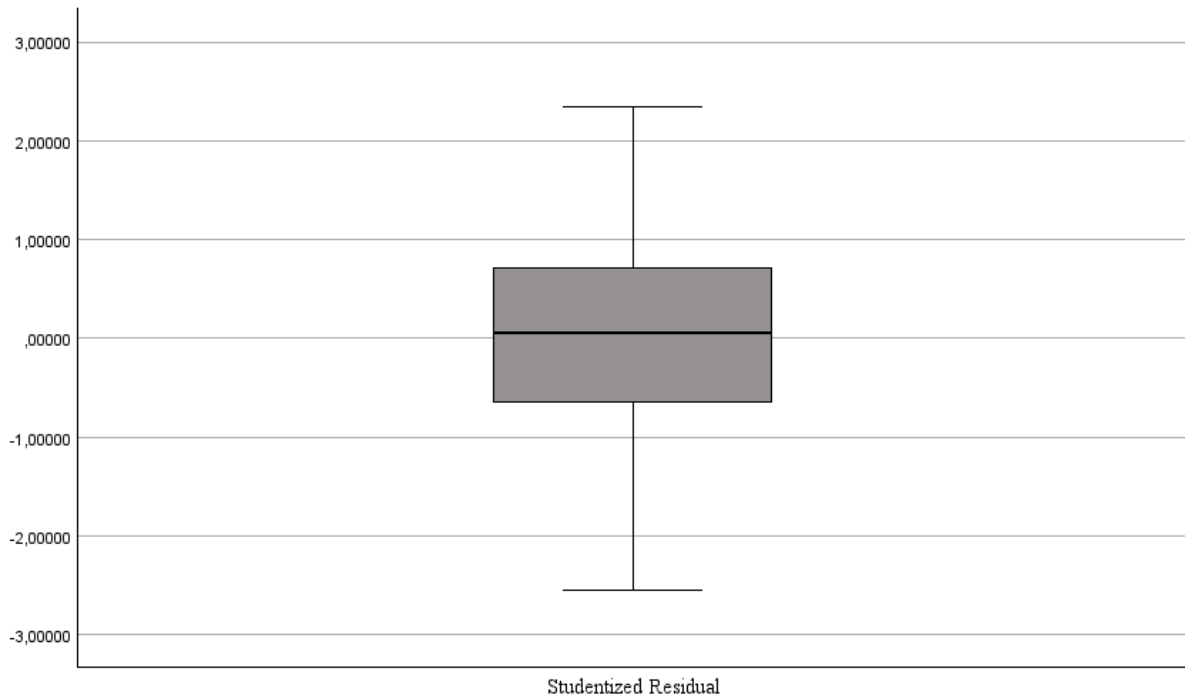
Dependent Variable: IINT

Parameter	<i>B</i>	<i>Robust Std. Error^a</i>	<i>t</i>	<i>p</i>	95% Confidence Interval	
					Lower Bound	Upper Bound
(Constant)	3.804	.415	9.162	<.001	2.982	4.626
PFP	.225	.084	2.693	.008	.060	.391
PRI	-.126	.087	-1.443	.152	-.299	.047
Gender ^b	-.250	.135	-1.845	.067	-.518	.018
Living area ^c	-.033	.140	-.233	.816	-.309	.244

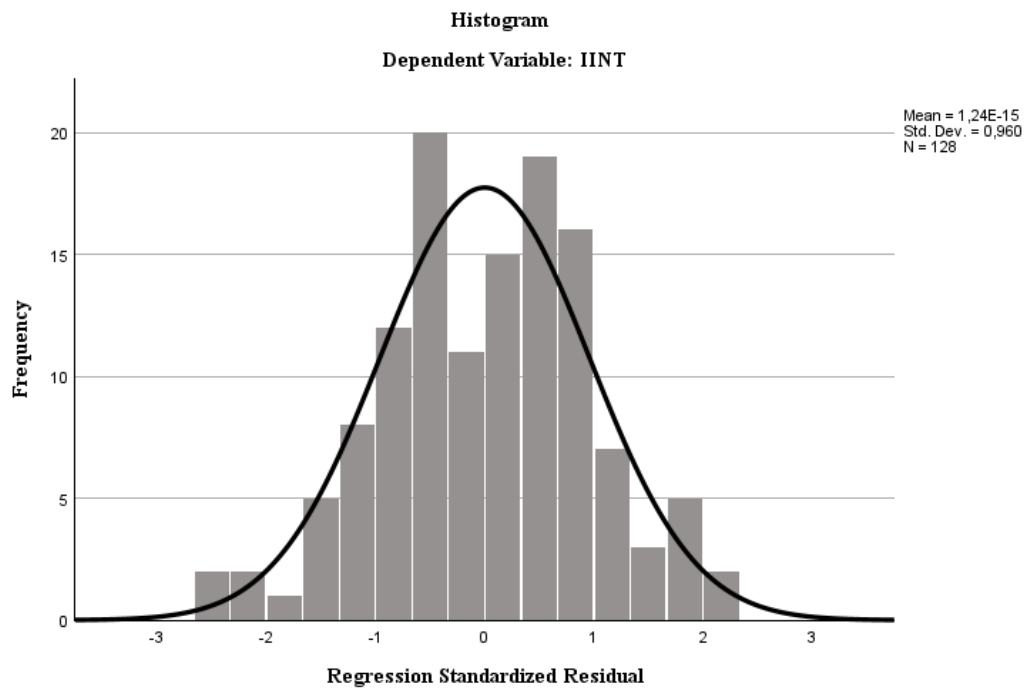
Note. Number of studies = 127. *B* represents unstandardized regression weights; ^a HC3 method. ^b 1 = female, 2 = male. ^c 1 = rural, 2 = urban

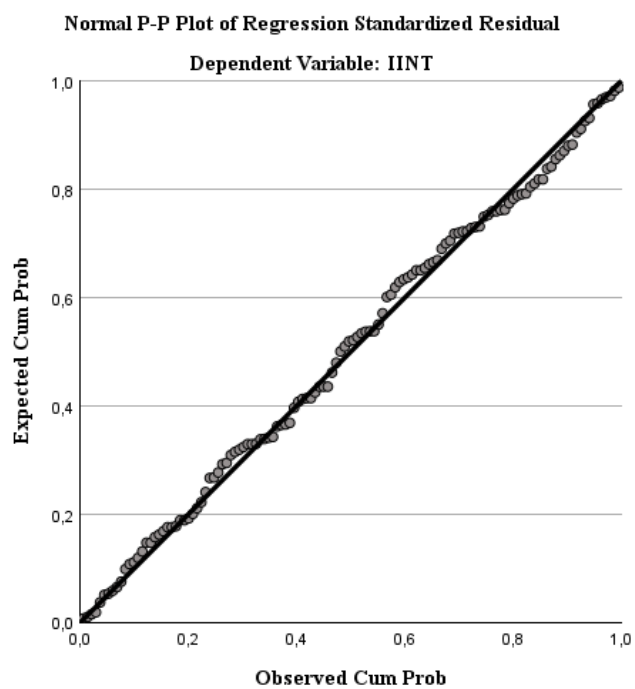
Annex H Regression Analysis model 4

H.1 Outliers



H.2 Normality Assumption





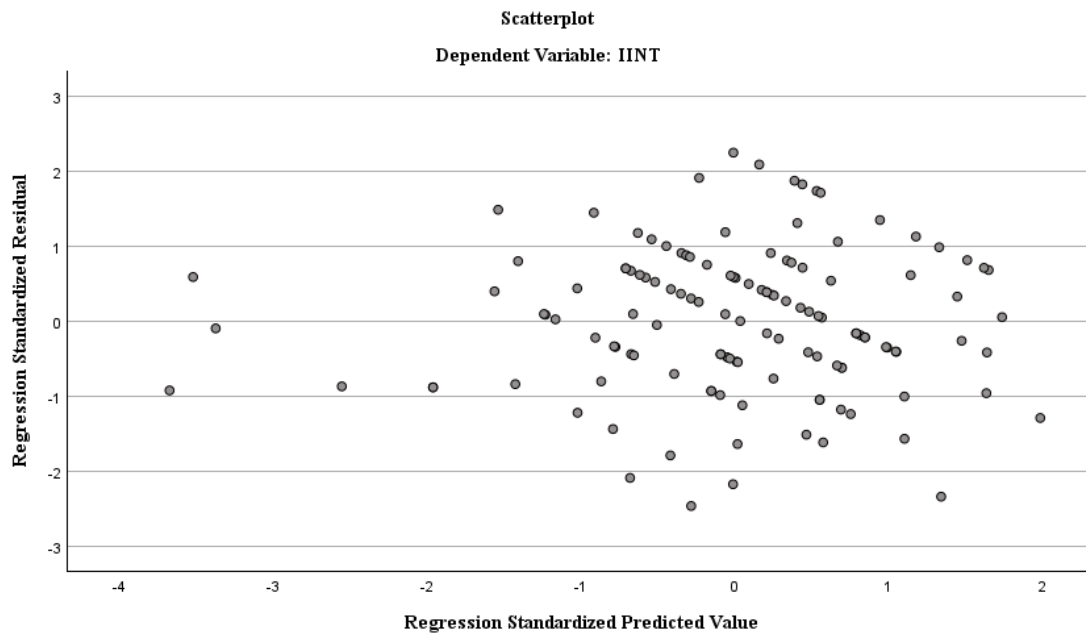
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Studentized Residual	.047	128	.200*	.993	128	.801

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

H.3 Homoscedasticity Assumption



Breusch-Pagan Test for Heteroskedasticity^{a,b,c}

Chi-Square	df	Sig.
.273	1	0.601

^a. Dependent variable: IINT

^b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables.

^c. Predicted values from design: Intercept + ATT + SN + PBC + PCE + Trust + PSA + PFP + PRI + Gender + Living area

H.4 No Multicollinearity Assumption

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
4	(Constant)		
	ATT	0.652	1.534
	SN	0.775	1.290
	PBC	0.816	1.226
	PCE	0.653	1.576
	Trust	0.722	1.385
	PSA	0.691	1.446
	PFP	0.858	1.165
	PRI	0.797	1.255
	Gender	0.752	1.330
	Living area	0.931	1.074

^a. Dependent Variable: IINT

H.5 Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
4	.701 ^a	.492	.449	.60315	2.072

^a. Predictors: (Constant), Gender, Living area, PRI, PFP, PSA, Trust, PCE, PBC, SN, ATT

^b. Dependent Variable: IINT

H.6 F-Statistic

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
4	Regression	41.228	10	4.123	11.33	<.001 ^b
	Residual	42.564	117	.364		
	Total	83.792	127			

^a. Dependent Variable: IINT

^b. Predictors: (Constant), Gender, Living area, PRI, PFP, PSA, Trust, PCE, PBC, SN, ATT