

The motivation of investors for equity-based crowdfunding in the Netherlands

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ABSTRACT,

With equity-based crowdfunding becoming a more popular funding strategy, it is critical to understand what motivates people to invest. While prior studies have looked at investment motivations in global contexts, empirical research in the Netherlands is limited. This study investigates how intrinsic motivators (e.g., curiosity, creativity, trust) and extrinsic motivators (e.g., financial profit, recognition) affect the intention to invest in equity-based crowdfunding campaigns. An online survey with 29 Dutch participants was used to collect data, which was then analyzed in RStudio using binary logistic regression. The results demonstrate that while financial reward had a marginally significant beneficial impact, intrinsic motivators did not significantly predict investment intention. Furthermore, those who were 30 years of age or older were significantly more likely to say that they intended to invest. These results imply that demographic variables like age and financial considerations might be more crucial than previously assumed. This study contributes to the literature by offering initial insights into motivational patterns among Dutch (potential) investors and may inform more targeted crowdfunding campaign strategies.

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Keywords

Crowdfunding, Equity Crowdfunding, Investors, Intrinsic Motivation, Extrinsic Motivation

1. INTRODUCTION

In 2024, the Netherlands had a total of 2,3 million businesses. 99.9% of all businesses are classified as SMEs. SME is a fairly broad category of firms that includes microbusinesses, small businesses, medium-sized enterprises, and self-employed workers. (IBO-Bedrijfsfinanciering, 2024) Dutch SMEs surpass the European average and generate proportionately more added value to GDP (61%) than SMEs in nations like Germany, Belgium, France, and Sweden. (European-Commission, 2023; Wyman, 2023) The claim that Dutch micro and small SMEs are not reaching their full growth potential because it is more difficult to obtain finance in the Netherlands (compared to peers in the EU) is supported by certain metrics, such as greater returns on assets. (Beck & Demircuc-Kunt, 2006; Wyman, 2023) Even though bank loans continue to be their primary source of funding, SMEs in the Netherlands are finding it more difficult to get bank loans than their peers in the EU. Dutch banks usually reject 60% more applications than their peers in the EU. (Commission, 2023; Wyman, 2023) The high returns on assets and high rejection rate indicate that many SMEs, including many who may be financially viable, may not have access to debt finance if and when they need it. (Wyman, 2023)

1.1 Background information

Crowdfunding has become more popular over the last few years, especially for SMEs in their early growth stages. The fundamental concept of crowdfunding is easy: rather than seeking funding from traditional methods, entrepreneurs attempt to raise funds online from a larger audience (referred to as the "crowd"), where each person contributes a small sum. (Belleflamme & Lambert, 2014) In the Netherlands, there are approximately 80 different crowdfunding platforms. All of these platforms are slightly different from each other. (Heeger, 2024) These platforms can use 4 types of crowdfunding. Donation-based crowdfunding allows people or nonprofit organizations to gather funds for a cause, without giving anything back in return, like tangible goods. Reward-based crowdfunding is a type of funding where entrepreneurs or organizations seek financial contributions from a large number of investors. The reward is a good or service. In lending-based crowdfunding, investors receive fixed interest rates on their loans. Lastly, equity-based crowdfunding is a type of funding where entrepreneurs sell a certain percentage of their equity/ownership in their company. (Vismara, 2019)

The investors play a big role in these crowdfunding campaigns; they determine the success of the campaigns. However, investors must deal with some uncertainty while choosing which campaign to fund. Investment uncertainty derives from information asymmetry, emphasizing the significance of information availability in managing uncertainty. The lack of face-to-face contact with entrepreneurs and a lack of information among backers are major concerns in investment decision-making. (Olsson, 2024) As a result, many campaigns fail to meet the investor's funding goals. This emphasizes how important it is to understand what motivates backers to invest, specifically whether they are motivated by intrinsic factors, such as enjoyment, or by extrinsic factors, such as financial rewards.

1.2 Intrinsic and extrinsic motivation

A key idea in psychology is intrinsic motivation theory, which explains why people do things for their own happiness, joy, or sense of achievement rather than in response to pressures or incentives from outside sources. This theory has been thoroughly investigated in a number of fields, such as social interactions, workplace dynamics, and education. (Deci & Ryan, 1985; Ryan & Deci, 2000a) The opposite of intrinsic motivation is extrinsic

motivation. It refers to acting in ways that are driven mainly by pressures or rewards from outside sources rather than by the intrinsic enjoyment of the action. Actions done to obtain rewards like money, recognition, or to avoid criticism or punishment are characteristics of extrinsic motivation. (Ryan & Deci, 2020)

1.3 Academic and practical relevance

Equity-based crowdfunding is quite new compared to the other types of crowdfunding in the Netherlands. Launched in 2011, Symbid, a platform based in Rotterdam, was one of the first equity-based crowdfunding platforms in Europe. (Borlovan, 2023)

In prior research, there have been mixed findings on equity-based crowdfunding investors' motivations. While some studies have indicated that financial payoffs are almost the only factor influencing investment decisions, other literature suggests that investors in equity-based crowdfunding are driven only by intrinsic motivations rather than financial goals. Yet additional research indicates that investors in equity crowdfunding may be driven by both intrinsic and extrinsic motivators. (Cholakova & Clarysse, 2015; Lukkarinen et al., 2019; Ordanini et al., 2011; Pierrakis & Collins, 2012; Schwienbacher, 2010) Aspects like shaping campaign outcomes, the creation of an online identity, the potential for recognition, and the possibility of receiving returns or prizes have been identified as motivators for investing in equity crowdfunding, whereas altruism plays a minimal role. (Bretschneider & Leimeister, 2017)

The majority of research on equity-based crowdfunding is conducted in different countries, especially in the United States of America. There hasn't been much investigation about investors in the Netherlands. Though Equity-based crowdfunding gains more and more popularity in the Netherlands, the motivations driving the Dutch investors' decisions remain insufficiently explored.

1.4 Research Question

There are many uncertainties for investors in crowdfunding when choosing which business they want to fund. This thesis aims to understand what motivates crowdfunding investors/backers in the Netherlands to invest in a certain campaign. The following research question will be the main focus of this study.

"What intrinsic and extrinsic motivators influence the investment decisions of equity-based crowdfunding investors in the Netherlands?"

2. LITERATURE REVIEW & HYPOTHESES

"Motivation is what makes us act the way we do, motivation is the needs, wants, interests, and desires that energize & direct behavior." (Neil, 2015, p. 8). People have not only different levels of motivation, but also different types of motivation. In other words, their motivation varies not only in terms of its amount (i.e., how much motivation), but also in terms of its orientation (i.e., what kind of motivation). (Ryan & Deci, 2000a)

2.1 Self-Determination Theory

Self-determination Theory (SDT) explores human motivation across culture, gender, age, and socioeconomic level. This motivational theory focuses on what drives people to act and how they manage their behavior across various aspects of life. Self-determination theory explains results at the psychological level, utilizing human perceptions, thoughts, emotions, and needs to predict governing, behavioral, growth-related, and experiential outcomes. (Deci & Ryan, 2015; Ryan & Deci, 2000b) In Self-Determination Theory, Deci & Ryan distinguish different types of motivation. The primary distinction is between intrinsic and

extrinsic motivation.(Deci & Ryan, 1985; Ryan & Deci, 2000a) When someone is motivated to accomplish something only because they enjoy it, that is known as intrinsic motivation. When someone feels driven to do something to achieve an external objective or adhere to an externally imposed limitation, this is known as extrinsic motivation. (Hennessey et al., 2015)

“Within self-determination theory, there are six mini-theories: Cognitive Evaluation Theory, Organismic Integration Theory, Causality Orientations Theory, Basic Psychological Needs Theory, Goal Contents Theory, and Relationships Motivation Theory.” (Ryan & Deci, 2018)

2.1.1 Cognitive Evaluation Theory

This theory explains how social environments can boost or weaken someone’s natural motivation to do things just because they enjoy them. Cognitive Evaluation Theory (CET) is solely focused on intrinsic motivation; it focuses on how social factors affect intrinsic motivation. CET has a social psychology approach that examines how social inputs and settings impact intrinsic motivation, as well as a personality perspective that identifies a fundamental part of human nature and its development. According to CET, events that negatively impact a person's sense of autonomy or competence reduce intrinsic motivation, whereas those that reinforce these beliefs increase intrinsic motivation. (Ryan & Deci, 2018) Creation and innovativeness fulfill competence by allowing individuals to express and enhance their abilities, and fulfill autonomy when they independently undertake these artistic activities. (Putney et al., 2024) Similar to this, curiosity is a classic intrinsically motivated drive since it entails freely selected exploration (autonomy) as well as knowledge gain (competence). (Perlovsky et al., 2010) Lastly, when an activity is enjoyable, it indicates that competence and autonomy are being met. Competence through fluency and progress, autonomy through self-selected involvement, and behavior that is sustained by intrinsic motivation.

2.1.2 Organismic Integration Theory

This theory shows that even motivations that come from outside (like rewards) can feel more or less personal, depending on how well someone accepts or identifies with them. Organismic Integration Theory (OIT) was presented to explain the various types of extrinsic motivation and the environmental elements that either promote or hinder the internalization and integration of the rules governing these actions. (Ryan & Deci, 2000a) There are four types of motivational regulation: external, introjected, identified, and integrated regulation. These types differ in autonomy, antecedents, and effects on behavior. (Ryan & Deci, 2018) Financial profit is an example of external regulation: people behave to obtain material benefits (bonuses, money, etc.). This motivation is dependent on external factors and lacks autonomy. Fulfilling a personal need, on the other hand, indicates more internalized regulation, such as identified or integrated regulation. These are perceived as more autonomous since they are in line with one's values.(Ryan & Deci, 2020)

2.1.3 Causality Orientations Theory

This theory looks at people’s different motivational styles, how some act from inner drive, others to meet expectations, and others from a lack of control. focuses on individual differences in motivational styles. Causality orientations refer to how people see and organize information based on their motivations. There are three types of motivational orientations, known as causality orientations. These three orientations are: autonomy, regulated, and impersonal orientation. These orientations have an impact on people's behavior, experience, and general need satisfaction in addition to their situation-specific motivation. (Ryan & Deci, 2018) Someone with an autonomy orientation views

opportunities for personal validation and competence in, for example, tasks involving creativity or enjoyment, as well as in recognition and financial profit.(Hagger & Hamilton, 2020) These same rewards are framed as outside forces by a control orientation, which results in actions driven by guilt, obedience, or outside approval. Amotivation and disengagement are frequently caused by impersonal orientation, which is typified by poor perceived efficacy and leaves people feeling disconnected from the relationship between their activities and results.

2.1.4 Basic Psychological Needs Theory

This theory says that everyone needs to feel free, capable, and connected to others to feel good and function well. In Basic Psychological Needs Theory (BPNT), the fulfillment of the three fundamental psychological needs is necessary for integrity, well-being, and healthy development. These include relatedness, competence, and autonomy needs.(Ryan & Deci, 2018) Autonomy is the ability to take initiative and take responsibility for one's actions. It is reinforced by experiences of value and interest and weakened by experiences of being influenced by other forces, such as incentives or penalties. (Ryan & Deci, 2020) Competence is about the ability to achieve and develop, and about the feeling of mastery. Well-structured settings that provide the right amount of challenge, constructive feedback, and growth opportunities are the best places to meet the demand for competence. (Ryan & Deci, 2020) Relatedness is about feeling connected and at home. It is made easier by communicating compassion and respect. (Ryan & Deci, 2020) People learn to pursue money, status, and power through socialization; these motivations are internalized.(Deci & Ryan, 1985; Fishbach & Woolley, 2022) Reduced growth, integrity, and wellness will result from not meeting any of these three needs. Furthermore, need frustration is linked to higher levels of illness and poorer functioning, usually as a result of these fundamental needs being denied.(Ryan & Deci, 2018) In this theory, Creativity and innovativeness fulfill competency, enabling individuals to master a skill. Curiosity and enjoyment fulfill autonomy through self-directed learning and exploration. (Ryan & Deci, 2000a; Ryan & Deci, 2018) On the other hand, relatedness is directly improved by the social incentives of reciprocity, trust, and altruism, which foster emotional ties and reciprocal care. (Ryan & Deci, 2018)

2.1.5 Goal Contents Theory

This theory is about what kind of goals people choose; goals focused on growth and connection are healthier than those focused on money or fame. In SDT, a lot of research focuses on people's motivations, or the reasons behind their actions or goals. The focus of Goal Contents Theory (GCT) is on the what of people's actions, or the essence of their life goals, rather than the why. Prioritizing intrinsic desires is associated with higher well-being, while a stronger focus on extrinsic objectives is associated with lower well-being. This pattern of outcomes is mostly caused by extrinsic goals' stronger tendency to be controlled instead of autonomous and to fall short of meeting fundamental psychological requirements. (Ryan & Deci, 2018)

An individual is more likely to meet psychological requirements if their goals are intrinsic, such as those related to health and personal development. (Deci & and Ryan, 2000; Gunnell et al., 2014; Vansteenkiste et al., 2010) On the other hand, extrinsic goal items, like image and recognition, are sought after for external reasons, like self-worth, and are less likely to result in the satisfaction of psychological needs. (Deci & and Ryan, 2000; Gunnell et al., 2014) Inherently linked to autonomy, competence, and relatedness, creativity, curiosity, enjoyment, altruism, and reciprocity are goal contents that consistently predict greater psychological well-being and

engagement. Extrinsic goals that are intended to achieve separate results are reflected in financial profit, recognition, and personal need; even when these are accomplished, they are associated with worse psychological outcomes, tend to promote controlled motivation, and diminish autonomy and relatedness.

2.1.6 Relationships Motivation Theory

This theory explains why we form close connections, not for rewards, but because we naturally want to feel close and supported. According to Relationship Motivation Theory (RMT), people are more likely to voluntarily get into close relationships because of their intrinsic relatedness requirement. Any elements that suggest that the other person lacks the autonomy to connect, as well as those that undercut an internal perceived locus of causality for social interactions, diminish a sense of relatedness. (Ryan & Deci, 2018) The relationship between social support and psychological well-being outcomes is mostly mediated by need satisfaction as opposed to frustration, according to RMT. Authenticity, emotional dependence, transparency, and lack of defensiveness are all facilitated when an individual receives autonomous support from a relational partner. According to RMT, when giving relational partners autonomous support also satisfies the giver's basic needs, improving their wellbeing in addition to the benefits of receiving care. (Ryan & Deci, 2018) When partners see one another as autonomous and encouraging, trust develops, strengthening the bonds of connection and creating a secure space for individual expression. Altruism promotes mutuality and well-being by satisfying the relatedness of both parties. Healthy interdependence is promoted by reciprocity, which guarantees equally responsive agreements.

2.2 Hypotheses

Intrinsic Motivation

Creation, innovativeness

The degree to which a person embraces new concepts comparatively sooner than the typical member of their social system is referred to as innovativeness. (Rodriguez-Ricardo et al., 2018; Rogers & Shoemaker, 1971) Given the creative nature of crowdfunding, it can be assumed that an individual's degree of innovation will have a direct impact on their involvement in this activity. (Manning et al., 1995; Ordanini et al., 2011; Rodriguez-Ricardo et al., 2018)

H1: A person's level of creativity and innovativeness has a positive effect on investing in equity-based crowdfunding.

Curiosity

When people express interest, curiosity, enjoyment, and other positive emotions, we believe that they are intrinsically motivated. (Amabile et al., 1994; Fishbach & Woolley, 2022; Gagné et al., 2010; Grant, 2008; Vallerand et al., 1992) People are naturally curious about new or different things, and curiosity is a fundamental aspect of human nature. Investors will be more likely to fund because crowdfunding is offering a variety of new and unique goods and/or services, and they want to know if the goods and/or services will continue to exist. (Ordanini et al., 2011)

H2: Being curious about crowdfunding has a positive influence on investing in equity-based crowdfunding campaigns.

Enjoyment

"Enjoyment is the feeling of happiness and pleasure." (Dictionary, 2025) Investors can feel enjoyment when they invest in a campaign through crowdfunding. (Kim-Vick et al., 2007)

H3: Having fun when making investments has a positive influence on investing in equity-based crowdfunding.

Trust

Trust is crucial since SMEs and entrepreneurs rely heavily on crowdfunding to raise capital, and there is a great deal of information asymmetry in these endeavors. Crowdfunding operations are reported to have more information asymmetry than traditional finance methods. (Ahlers et al., 2015; Wasiuzzaman, 2021)

H4: A campaign looking trustworthy has a positive influence on investing in equity-based crowdfunding.

Altruism

Supporters may act in an altruistic manner, which is defined as "doing something for another at some cost to oneself" and is the exact opposite of selfishness. (Bretschneider & Leimeister, 2017; Ozinga, 1999) The idea of altruism is comparable to donation-based crowdfunding, where crowdfunders want to help with their funds but do not expect returns on their funds. (Bretschneider & Leimeister, 2017)

H5: Being altruistic as an investor has a positive effect on investing in equity-based crowdfunding.

Reciprocity

Because they have received something themselves, people often feel obligated to establish a balance and repay. This phenomenon is known as reciprocity. (Robert B, 2010) The reason for reciprocity is that project creators who have successfully raised money for their campaigns through crowdfunding are more likely to return the favor by becoming investors and investing funds in other campaigns. (Bretschneider et al., 2014; Hemer et al., 2011)

H6: Reciprocity has a positive effect on investing in equity-based crowdfunding.

Extrinsic motivation

Financial profit

Investors in equity crowdfunding campaigns make an investment choice rather than a consumption choice, in contrast to other types of crowdsourcing. Therefore, it is likely that the primary motivator for investing in such a company will be financial motivation. (Cholakova & Clarysse, 2015; Wasiuzzaman, 2021)

H7: The return (financial profit) of a campaign has a positive influence on investors' participation in equity-based crowdfunding.

Personal need

An investor may provide funds to a startup to modify or develop the product or service to meet the needs of the investor. Since the start-up usually introduces its primary product or services to the crowd (investors), this is an alluring opportunity. (Bretschneider et al., 2014)

H8: Having a 'personal need' has a positive effect on investing in equity-based crowdfunding.

Recognition

Recognition is considered a fundamental human need since it boosts one's sense of self-worth. (Bretschneider et al., 2014; Nerdinger, 2006) Investors may contribute to a start-up to raise awareness and gain appreciation from others, the community, and society at large. This is crucial if the start-up later achieves great success. (Bretschneider et al., 2014)

H9: Recognition after investing in campaigns has a positive effect on investing in equity-based crowdfunding.

Table 1: Crowdfunding motivations and their types

<i>Motivation</i>	<i>Type of Motivati on</i>	<i>Hypothes es</i>	<i>Source</i>	<i>SDT-Theory</i>
Creation, Innovative ness	<i>Intrinsic</i>	<i>H1</i>	Rodriguez-Ricardo et al. (2018)	CET, COT, BPNT, GCT
Curiosity	<i>Intrinsic</i>	<i>H2</i>	Bretschneider et al. (2014)	CET, BPNT, GCT
Enjoyment	<i>Intrinsic</i>	<i>H3</i>	Bretschneider et al. (2014)	CET, COT, BPNT, GCT
Trust	<i>Intrinsic</i>	<i>H4</i>	Wasiuzzaman et al. (2021)	BPNT, RMT
Altruism	<i>Intrinsic</i>	<i>H5</i>	Bretschneider et al. (2014)	BPNT, GCT, RMT
Reciprocity	<i>Intrinsic</i>	<i>H6</i>	Bretschneider et al. (2014)	BPNT, GCT, RMT
Financial profit	<i>Extrinsic</i>	<i>H7</i>	Wasiuzzaman et al. (2021)	OIT, COT, GCT
Personal need	<i>Extrinsic</i>	<i>H8</i>	Bretschneider et al. (2014)	OIT, GCT,
Recognition	<i>Extrinsic</i>	<i>H9</i>	Lukkarinen et al. (2019)	COT, GCT,

3. METHODOLOGY

3.1 Data gathering process

To gather data for this research, a survey was conducted about the motivation of equity crowdfunding investors in the Netherlands. An email was sent to 5 different Dutch equity crowdfunding platforms, asking if they wanted to collaborate. (Example email in Appendix 9.1) One platform (NPEX) responded that they wanted to collaborate and posted the survey in their newsletter. The survey was also posted on LinkedIn, Reddit, and shared through different WhatsApp and LinkedIn groups.

3.2 Sample

By distributing the online survey through LinkedIn, Reddit, and the newspaper of NPEX, a total of 14 responses were obtained. This number was, however, insufficient to carry out logistic regression. Using a power analysis tool (G-power), given an effect size of 0.15 and an alpha error probability of 0.05, 166 responses are required to do regression analysis with 9 independent variables. (Wasiuzzaman, 2021) To get more responses, the survey was also distributed through WhatsApp and LinkedIn groups. In these posts was mentioned that inexperienced individuals who do not invest in equity crowdfunding may also respond to the survey. This resulted in a

total of 29 responses. To decide whether a response is correct or incorrect, a minimum duration of 1/3 of the median survey time was picked. Responses beneath 105 seconds (1 minute and 45 seconds) would be excluded. Straight liners (>80%) would also be excluded. Neither of the cleaning methods applied to this survey since all responses were valid. Thus, the final sample size is 29.

3.3 Method

To answer the research question and hypotheses, a survey was conducted for quantitative research. The questions in this survey were derived from existing literature, as shown in Table 2 in Appendix 9.2. *The independent variables:* the intrinsic motivators (e.g., creativity, curiosity, fun, trust, altruism, reciprocity) and extrinsic motivators (e.g., financial profit, personal need, recognition), are ordinal variables and were measured using a five-point Likert scale. (1= strongly disagree, 5 = strongly agree) *The dependent variable* is the intention to invest in equity-based crowdfunding. (Int_Invest) This variable is categorical, specifically a dichotomous variable (binary), because this variable was measured with a ‘yes’ or ‘no’ question and coded as “1” and “0”. *The control variables:* Demographic factors such as age, gender, nationality, and prior investment experience, are categorical, specifically nominal variables, which were measured with multiple-choice questions. (Ryu & Kim, 2018; Zhang & Chen, 2019)

3.4 Data Analysis

The collected data from Microsoft Forms is imported into RStudio through an xlsx file. To examine the influence of intrinsic and extrinsic motivators on investment decisions in equity-based crowdfunding, logistic regression is used. The relationship between one or more independent variables (continuous or categorical) and a single dichotomous dependent variable is studied using logistic regression analysis. (Riffenburgh & Gillen, 2020) Typically, binary logistic regression is used when dealing with dependent variables that are dichotomous or binary (having just two values). (van den Berg, 2024) Regular linear regression and logistic regression vary in that linear regression assumes that Y is continuous (bell-shaped), whilst logistic regression assumes that Y is a collection of categories (binary logistic regression only uses two categories). (Fritz & Berger, 2015) The dependent variable is Int_Invest, where “1” means yes (person intends to invest) and “0” means no (person doesn’t intend to invest).

Due to the small sample size, the hypotheses are tested individually, if not the model can be unreliable. A separate binary logistic regression is used to examine the relationship between a specific variable and the intention to invest in equity-based crowdfunding. For each model, not all control variables are included. Including too many control variables in small-N logistic models can lead to overfitting and unreliable estimates. (Peduzzi et al., 1996) It is best to choose 1 or 2 essential control variables. The 2 chosen variables are ‘Age’ and ‘Prior investment experience’, because there is a high chance that the answers from ‘Nationality’ and ‘Gender’ show little to no variation.

$$\log(P/(1-P)) = \beta_0 + \beta_1 \text{Motivator} + \gamma_1 \text{Age} + \gamma_2 \text{PriorInvestExp}$$

Where:

P = the probability that Int_Invest = 1

log(P/(1-P)), log-odds of intending to invest

β₀ = Intercept (log-odds of investing when all predictors are 0)

β₁ = Effect of creativity/innovativeness on the log-odds of investing

Motivator = one of the intrinsic or extrinsic motivators

γ_1 = Coefficient for Age

γ_2 = Coefficient for Investment Experience

4. RESULTS

The data was analyzed in RStudio. A descriptive overview of the sample characteristics is provided in Table 3 (Appendix 9.3). In total, 29 participants took part in the survey. The age distribution showed that just over half ($n = 15$) were aged 18–30, while the remaining participants ($n = 14$) were 30 years or older. Given the small number of respondents aged 30–50 ($n = 2$), this group was merged with the 50+ category to ensure a more balanced comparison. The majority of respondents were male ($n = 19$), and all participants reported Dutch nationality. In terms of investment background, almost more than half of the respondents ($n = 16$) had prior experience investing. A significant portion ($n = 13$) had not previously engaged in equity crowdfunding, and many participants ($n = 13$) had only been participating for less than a year. The majority invested less than once a year, or only when something interesting came along. Furthermore, 21 out of 29 participants reported investing less than 25% of their portfolio in equity crowdfunding. The dependent variable *Int_Invest* (intention to invest) was coded as a binary variable, with 19 participants indicating an intention to invest. The continuous independent variables (e.g., curiosity, creativity, trust) had moderate means ranging from 2.6 to 4.0 on a 5-point scale, with standard deviations generally less than 1.0, indicating moderate variance in answers.

4.1 Correlation and Multicollinearity

First, Spearman rank-order correlations were performed to assess the bivariate relationships between each independent variable, the control variables, and the dependent variable. (Table 4, Appendix 9.4) This non-parametric test is particularly useful when normality assumptions are violated, or when working with small sample sizes and ordinal or non-normally distributed data. (Field et al., 2018) The correlations between each independent variable (motivator) and the dependent variable (*Int_Invest*) ranged from -0.06 to 0.25 and were consistently non-significant (all p -values > 0.10), indicating weak relationships.

Variance Inflation Factors (VIFs) were used to determine multicollinearity between the independent variables and the two control variables. Across the models, the VIF values ranged from 1.02 to 1.85, which is significantly below the usually accepted threshold of 5, indicating that multicollinearity was not a concern. (O'brien, 2007)

Table 5: VIF values and Spearman Correlation with Investment Intention

Model	Variable	VIF (Main)	VIF (AgeGroup)	VIF (Experience)	Spearman rho
H1	Creativity	1.14	1.62	1.48	0.027
H2	Curiosity	1.02	1.58	1.59	0.249
H3	Enjoyment	1.29	1.43	1.63	0.018
H4	Trust	1.23	1.7	1.77	0.159
H5	Altruism	1.03	1.51	1.47	0.044
H6	Reciprocity	1.23	1.62	1.56	0.044

H7	Profit	1.82	2.7	1.69	0.128
H8	Need	1.38	1.79	1.49	-0.062
H9	Recognition	1.39	1.85	1.72	0.123

VIF = Variance Inflation Factor. Spearman rho values represent the rank-order correlation between the independent variable and investment intention (*Int_Invest*).

4.2 Binary Logistic Regression

For each of the 9 hypotheses, a separate binary logistic regression model was used. Each model had an independent motivator along with two control variables, AgeGroup and Experience. None of the independent variables was statistically significant at the 5% level. However, Hypothesis 7, financial profit, had a marginally significant effect ($p = 0.092$), which suggests a weak positive relationship between financial profit and the intention to invest. Hypothesis 7 had for AgeGroup 30+, a statistically significant effect ($p = 0.0350$), suggesting that older participants are more likely to intend to invest. In several other models (H1, H3, H5, and H8), AgeGroup30+ also had a marginally significant effect (p -values between 0.05 and 0.10), suggesting that older participants are more likely to invest than younger participants.

Table 6: Binary Logistic Regression Results

Model	Variable	Coefficient(SE)	Odds Ratio
H1	Creativity	-0.400 (0.686)	0.67
	AgeGroup 30+	2.203 (1.180)*	9.054
	Experience	-0.171 (1.054)	0.842
H2	Curiosity	0.645 (0.714)	1.907
	AgeGroup 30+	1.954 (1.174)*	7.055
	Experience	-0.264 (1.102)	0.768
H3	Enjoyment	-0.349 (0.604)	0.705
	AgeGroup 30+	2.061 (1.107)*	7.852
	Experience	0.073 (1.107)	1.076
H4	Trust	0.339 (0.652)	1.404
	AgeGroup 30+	1.773 (1.209)	5.887
	Experience	0.079 (1.151)	1.083
H5	Altruism	-0.028 (0.548)	0.972
	AgeGroup 30+	2.032 (1.133)*	7.63
	Experience	-0.165 (1.045)	0.848
H6	Reciprocity	0.754 (0.792)	2.125
	AgeGroup 30+	2.221 (1.192)*	9.214
	Experience	0.022 (1.093)	1.022
H7	Financial profit	1.254 (0.745)*	3.504
	AgeGroup 30+	3.414 (1.619)**	30.397
	Experience	-0.701 (1.191)	0.496
H8	Personal Need	0.254 (0.561)	1.289
	AgeGroup 30+	2.229 (1.238)*	9.294
	Experience	-0.118 (1.053)	0.889
H9	Recognition	0.714 (0.520)	2.042
	AgeGroup 30+	2.390 (1.300)*	10.911
	Experience	0.168 (1.170)	1.183

Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Sample size: $N = 29$. Dependent variable: Intention to Invest (binary). AgeGroup30+ compares respondents aged 30+ to the reference

group aged 18–30. Coefficients indicate the direction of the relationship; SE = standard error. Odds Ratios show the change in odds of investing per unit increase in the predictor (values >1 = higher odds, <1 = lower odds).

4.3 Comparison of Combined and Split Motivators

Before comparing combined and split (individual) motivators, Cronbach's alpha was used to assess the internal consistency of each motivator scale. Coefficient alpha measures scale reliability by calculating the average correlation between survey questions across all potential split-halves. A higher alpha suggests greater internal consistency, which means that the items consistently measure the same underlying construct. (Cronbach, 1951) Each motivator consisted of two survey items. The values in Table 7 refer to the reliability of the combined motivator sets. Motivator constructs with a Cronbach's alpha of 0.60 or lower were considered to lack internal consistency. Therefore, for these motivators, individual survey items were evaluated separately in the regression models. Models H1, H2, H4, H5, H6, H7 were chosen.

Table 7: Cronbach's alpha

Motivator	Cronbach's Alpha	Reliability
Creativity	0.47	Insufficient
Curiosity	0.40	Insufficient
Enjoyment	0.65	Tolerable
Trust	0.47	Insufficient
Altruism	0.52	Moderate
Reciprocity	0.36	Insufficient
Financial Profit	0.60	Moderate
Personal Need	0.74	Good
Recognition	0.82	Very good

Cronbach's alpha values below 0.70 are considered low. For Reciprocity, one item was reversed to correct for negative correlation.

Table 8 shows the results of binary logistic regression analyses of the split motivators to examine the relations between the split motivators and the combined motivators (Table 6) and the intention to invest. All models included *AgeGroup30+* as a control variable. The variable *Experience* was included in the analyses but has been excluded from Table 8, as it consistently showed no significance. For the variable Financial Profit, the combined motivator showed a marginally significant ($P < 0.10$) effect on investment intention, while the split motivators did not achieve significance. This shows that combining the two items may result in a more reliable and relevant measure of the underlying concept, hence increasing the model's predictive potential. All other motivators (creativity, curiosity, trust, altruism, and reciprocity) showed no significant differences between the combined and split versions. The control variable *AgeGroup30+* had consistent positive impacts in nearly all models, reaching significance at the 10% or 5% level in several cases. This suggests that older respondents (aged 30+) were more likely to express an interest in investing.

Table 8: Binary Logistic Regression Results, Split Motivators

Model	Variable	Coefficient (SE)	Odds Ratio
H1	Creativity_1	-0.022 (0.530)	0.978

	AgeGroup30+	2.030 (1.131)*	7.616
	Creativity_2	-0.403 (0.498)	0.668
	AgeGroup30+	2.2477(1.196)*	9.466
H2	Curiosity_1	0.504 (0.646)	1.656
	AgeGroup30+	1.975 (1.156)*	7.206
	Curiosity_2	0.339 (0.501)	1.403
	AgeGroup30+	1.982(1.150)*	7.252
H4	Trust_1	0.321 (0.550)	1.379
	AgeGroup30+	1.603(1.302)	4.968
	Trust_2	0.134 (0.488)	1.143
	AgeGroup30+	2.002(1.128)	7.407
H5	Altruism_1	-0.133 (0.511)	0.876
	AgeGroup30+	2.046(1.129)*	7.736
	Altruism_2	0.065 (0.440)	1.067
	AgeGroup30+	1.995(1.135)*	7.358
H6	Reciprocity_1	0.390 (0.440)	1.477
	AgeGroup30+	2.420(1.254)*	11.250
	Reciprocity_2	0.252 (0.647)	1.287
	AgeGroup30+	1.904(1.166)	6.718
H7	Financialprofit_1	0.708 (0.593)	2.029
	AgeGroup30+	2.655(1.348)**	14.236
	Financialprofit_2	0.903 (0.562)	2.467
	AgeGroup30+	3.260(1.613)**	26.050

Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

4.4 Hypothesis Testing

Each of the nine hypotheses (H1-H9) was tested using binary logistic regression analysis. Table 6 shows the results of the models that include the combined motivators, whereas Table 8 shows the results for the split motivators. In all models, *AgeGroup30+* and *Experience* were used as control variables; however, *Experience* consistently showed no significant effects and was thus omitted from Table 8.

Hypothesis 1 (H1) predicted that a person's creativity and innovativeness would have positive effects on their willingness to invest in equity-based crowdfunding. *AgeGroup30+* was marginally significant in this model. However, the combined and individual measures of creativity (Creativity_1 and Creativity_2) were not statistically significant ($p > 0.10$), indicating that H1 is not supported.

Hypothesis 2 (H2) predicted that curiosity would boost investment intention in equity-based crowdfunding. Similar to H1, *AgeGroup30+* was marginally significant, and neither the combined nor the split motivators were statistically significant ($p > 0.10$); hence, H2 is not supported.

Hypothesis 3 (H3) addressed enjoyment as a motivator for investing in equity-based crowdfunding. The regression model found that *AgeGroup30+* was marginally significant in this model and that there was no significant link between enjoyment (split and combined motivators) and investment intention ($p > 0.10$), indicating that H3 is not supported.

Hypothesis 4 (H4) examined the effect of trust on investment intention on equity-based crowdfunding. Trust had no statistically significant relation with investment intention in either the combined or split models ($p > 0.10$); hence, H4 is not supported.

Hypothesis 5 (H5) emphasized the effect of altruism on investment intention in equity-based crowdfunding. Although AgeGroup30+ was marginally significant in this model, the altruism motivator (both combined and split motivators) was not ($p > 0.10$). Therefore, H5 is not supported.

Hypothesis 6 (H6) examined whether reciprocity drives the intention to invest in equity-based crowdfunding. AgeGroup30+ was marginally significant in this model. Both the split motivators of reciprocity and the combined motivators produced insignificant findings ($p > 0.10$). Consequently, H6 is not supported.

Hypothesis 7 (H7) investigated the significance of financial profit on the intention to invest in equity-based crowdfunding. This was the only motivator with a marginally significant effect ($p = 0.092$) in the model with the combined variable but not in the split-variable models. This shows that combining numerous survey questions can better reflect the underlying concept than studying single items alone. Interestingly, the control variable AgeGroup 30+ was statistically significant at the 5% level ($p = 0.035$) in this model. This shows that older respondents were substantially more likely to express investing intentions than those aged 18 to 30. As a result, H7 is partially supported, with financial profit having minimal predictive power and age showing a clear influence.

Hypothesis 8 (H8) proposed that personal needs influence investment intentions on equity-based crowdfunding. The regression model showed that AgeGroup30+ was marginally significant in this model. It showed that Personal Need (split and combined) has no significant connection to investment intention ($p > 0.10$), indicating that H8 is not supported.

Hypothesis 9 (H9) predicted that recognition had a positive effect on investment intention of equity-based crowdfunding. The results show that AgeGroup30+ was marginally significant, and the split and combined motivators of recognition showed no significant effect ($p > 0.10$). Therefore, H9 is not supported.

4.5 Comparing Experienced and Inexperienced Participants

Although no significant relationship was found for experience in the regression models, the sample was split into experienced and inexperienced investors to explore potential group differences. This exploratory step was taken to add refinement to the findings and uncover any trends that may not have reached significance due to sample size limitations.

To determine whether investment experience influences the relationship between the motivators and investment intention, the analyses were rerun separately for participants with prior crowdfunding investing experience and those without such experience. Table 9 presents an overview of each model across both groups. Among experienced participants, none of the motivators demonstrated statistically significant effects on investment intention. Negative associations were found for *Creativity* ($B = -1.111$, $OR = 0.33$) and *Altruism* ($B = -1.279$, $OR = 0.28$), indicating that experienced participants with higher scores on these motivators may be less likely to invest. For unexperienced participants, several motivational factors showed moderate positive associations with investment intention, such as *Curiosity* ($B = 1.348$, $OR = 3.85$), *Altruism* ($B = 1.139$, $OR = 3.12$), and *Profit* ($B = 1.643$, $OR = 5.17$), although none reached statistical significance either. These opposing patterns imply that investment experience may influence how people respond to various motivation variables, even if the effects were not statistically significant.

Table 9: Logistic Regression Results: Experienced vs Inexperienced

Model	Exp Coefficient(SE)	Exp OR	Inexp Coefficient(SE)	Inexp OR
H1	-1.111(1.110)	0.33	0.400 (1.058)	1.49
H2	-0.081(0.984)	0.92	1.348 (1.178)	3.85
H3	-0.749(1.249)	0.47	-0.411(0.764)	0.66
H4	0.549(0.978)	1.73	0.161 (0.845)	1.17
H5	-1.279(0.946)	0.28	1.139 (0.915)	3.12
H6	0.000 (1.078)	1.0	1.629 (1.471)	5.1
H7	0.773 (0.956)	2.17	1.643 (1.119)	5.17
H8	-0.288(0.765)	0.75	1.206 (1.080)	3.34
H9	0.322 (0.663)	1.38	1.184 (0.910)	3.27

Experienced (Exp) and inexperienced (Inexp) participants. Exp OR and Inexp OR represent the corresponding odds ratios. No coefficients were statistically significant at the $p < 0.10$ level.

5. DISCUSSION

The goal of this research was to investigate the influence of intrinsic and extrinsic motivators on the investment decisions in equity-based crowdfunding. The results showed that most motivators did not predict investment intention. Only financial profit showed a marginally positive effect on investment intention when measured as a combined variable. This aligns with findings of Lukkarinen et al. (2019) and Bretschneider & Leimeister (2017), who concluded that financial return is a key motivator in equity-based crowdfunding. Similarly, Cholakova & Clarysse (2015) identified financial rewards as the key motivator, with non-financial variables having a secondary role. These findings support the view that financial rewards are especially significant in equity-based crowdfunding. Unlike this study, Wasiuzzaman et al. (2021) and Rodriguez-Ricardo et al. (2018) discovered that investors are mostly motivated by intrinsic and social characteristics such as trust, innovativeness, altruism, and recognition. In contrast, the current findings demonstrate no significant effect of these motivators. To investigate further, analyses were conducted with both combined and split motivators. These extra models, however, revealed no new significant effects or notably stronger patterns, implying that using combined or split motivators made little difference in the outcomes. To better understand the variation in motivating influence, the analyses were repeated separately for experienced and inexperienced investors. Although neither group showed statistically significant results, different patterns appeared. Among experienced participants, higher levels of creativity and altruism were associated with a lower likelihood of investment, suggesting increased cautiousness or selectivity in their investment decisions. In contrast, inexperienced participants showed positive associations for several motivators, including curiosity, altruism, and profit, which could indicate a more exploratory or interest-driven approach to investing. These different patterns, however uncertain, suggest that investment experience may influence how individuals respond to various motivational drivers. Another significant finding is the continuous effect of age. Participants aged 30 and older were more likely to express investing intentions, regardless of their motivational profile. This suggests that demographic factors like age may have a greater impact on equity-based crowdfunding than previously believed.

6. CONCLUSION

This thesis examined whether intrinsic and extrinsic motivators influence investment intention in equity-based crowdfunding. The findings revealed that most individual motivators, such as curiosity, creativity, trust, altruism, and recognition, had no significant effect on investment intention. Only financial profit had a modestly beneficial effect, indicating that it may play a larger role than intrinsic motivators. A comparison of experienced and inexperienced participants showed opposing patterns: experienced participants showed negative correlations with particular motivators, whereas inexperienced participants showed positive relationships. Furthermore, age was consistently found to be a positive indicator, with respondents aged 30 and up showing a higher willingness to invest. Although the majority of the outcomes were not statistically significant, the observed patterns suggest that experience and age might influence how investment motivators are viewed.

6.1 Implications

The results of this study have several implications for both theory and practice. From a theoretical perspective, this study found no significant effects for intrinsic motivators, which contradicts prior research that emphasized the importance of non-financial elements in equity-based crowdfunding. However, the difference could be associated with methodological restrictions, such as a small sample size, which might have limited the ability to detect these effects. As a result, the findings do not necessarily contradict existing motivational theories but rather indicate that further research is needed to determine whether these theories hold true across different types of investors, particularly when considering variations in age, experience, and nationality. In practice, the small positive effect of financial profit shows that it may be necessary to emphasize financial consequences while promoting crowdfunding campaigns. Both platforms and campaign creators might benefit from focusing more on predicted returns and detailed financial information. Furthermore, the differences in patterns between experienced and inexperienced participants indicate that both groups perceive and respond to motivators differently. This emphasizes the need to personalize campaign messages for specific target populations. While beginner investors may be attracted to interesting or emotionally appealing characteristics, experienced investors are more likely to respond to detailed, transparent financial facts. Finally, the consistent effect of age indicates that older people are more likely to invest in equity-based crowdfunding. This suggests that crowdfunding platforms may improve campaign success by focusing more on older audiences, such as through targeted marketing or changing communication tactics to better match this group's interests.

6.2 Limitations & Recommendations

Despite the insights gained, this study has numerous limitations. First, the small sample size ($N = 29$) significantly limited statistical power and the ability to detect significant effects, particularly in subgroup analysis. Second, certain variables, especially those measuring intrinsic motivators, had low internal consistency (Cronbach's $\alpha < 0.60$), potentially reducing their predictive power. Third, it is possible that some respondents misinterpreted survey questions, particularly those referring to abstract motivators like trust or altruism. This could have impacted the accuracy and consistency of responses among participants. Fourth, because this study used a cross-sectional method, the findings only reflect relationships observed at one point in time. As a result, it is difficult to determine if one variable causes another. Finally, the sample leaned towards younger people, which could have influenced the findings. Given that older respondents consistently expressed a stronger desire to

invest, the age gap limits the impact of the results to a larger or more experienced investor group.

Several recommendations can be made for practice and future research. In practice, crowdfunding platforms should consider creating marketing tactics that take into consideration the distinctions between inexperienced and experienced investors. Because these groups seem to respond to different sorts of motivators, customizing communication styles to each audience may result in increased engagement. Inexperienced investors may be more drawn to personal stories and emotionally engaging content, whereas experienced investors are more likely to value clear financial information and transparency about potential risks and returns. Campaign creators should also focus more on the financial side of their efforts, particularly when targeting older or more experienced audiences. Because financial profit was the only motivator that consistently produced a favorable effect in this study, emphasizing predicted returns more clearly in advertisements may enhance investment intention among these groups. Future research should focus on improving how abstract motivators like trust and altruism are measured. This can be accomplished through pretesting and clearer wording of survey questions to improve reliability. Researchers should also seek to work with larger and more diversified samples, which will make it easier to compare subgroups such as age or investment experience. To further understand how motivations for investing vary and impact behavior over time, future studies should employ longitudinal or experimental research methodologies. These methodologies would allow researchers to investigate the causal relationships between motivators and actual investment decisions, rather than just finding correlations.

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8. REFERENCES

- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in Equity Crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955-980. <https://doi.org/10.1111/etap.12157>
- Amabile, T., Hill, K., Hennessey, B., & Tighe, E. (1994). The Work Preference Inventory: Assessing Intrinsic and Extrinsic Motivational Orientations. *Journal of personality and social psychology*, 66, 950-967. <https://doi.org/10.1037/0022-3514.66.5.950>
- Beck, T., & Demircuc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931-2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
- Belleflamme, P., & Lambert, T. (2014). Crowdfunding: Some Empirical Findings and Microeconomic Underpinnings. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2437786>
- Borlovan, P. (2023). The Netherlands: A Hub for Innovation and Entrepreneurship. <https://seedblink.com/2023-04-25-the-netherlands-a-hub-for-innovation-and-entrepreneurship>
- Bretschneider, U., Knaub, K., & Wieck, E. (2014). Motivations for crowdfunding: What drives the crowd to invest in start-ups? *ECIS 2014 Proceedings - 22nd European Conference on Information Systems*. https://pubs.wi-kassel.de/wp-content/uploads/2015/04/JML_5321.pdf
- Bretschneider, U., & Leimeister, J. M. (2017). Not just an ego-trip: Exploring backers' motivation for funding in incentive-based crowdfunding. *The Journal of Strategic Information Systems*, 26(4), 246-260. <https://www.sciencedirect.com/science/article/abs/pii/S096386871730032X?via%3Dihub>
- Cholakova, M., & Clarysse, B. (2015). Does the Possibility to Make Equity Investments in Crowdfunding Projects Crowd Out Reward-Based Investments? *Entrepreneurship Theory and Practice*, 39(1), 145-172. <https://doi.org/10.1111/etap.12139>
- Commission, E. (2023). *Survey on the Access to Finance of Enterprises (SAFE)*. Retrieved from https://single-market-economy.ec.europa.eu/access-finance/data-and-surveys-safe_en
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16(3), 297-334. <https://doi.org/10.1007/bf02310555>
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268. https://doi.org/10.1207/S15327965PL1104_01
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer New York, NY. <https://link.springer.com/book/10.1007/978-1-4899-2271-7>
- Deci, E. L., & Ryan, R. M. (2015). Self-Determination Theory. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)* (pp. 486-491). Elsevier. <https://www.sciencedirect.com/science/article/pii/B9780080970868260364>
- Dictionary, C. (2025). Enjoyment. In *Cambridge Dictionary*. <https://dictionary.cambridge.org/dictionary/english/enjoyment>
- European-Commission. (2023). *SME Performance Review*. Retrieved from https://single-market-economy.ec.europa.eu/smes/sme-strategy-and-sme-friendly-business-conditions/sme-performance-review_en
- Field, A., Miles, J., & Field, Z. (2018). *Discovering Statistics Using R*. Sage Publications. https://batrachos.com/sites/default/files/pictures/Books/Field_ea_2012_Discovering%20Statistics%20using%20R.pdf
- Fishbach, A., & Woolley, K. (2022). The Structure of Intrinsic Motivation. *Annual Review of Organizational Psychology and Organizational Behavior*, 9(1), 339-363. <https://doi.org/10.1146/annurev-orgpsych-012420-091122>
- Fritz, M., & Berger, P. D. (2015). Chapter 11 - Will anybody buy? Logistic regression. In M. Fritz & P. D. Berger (Eds.), *Improving the User Experience Through Practical Data Analytics* (pp. 271-304). Morgan Kaufmann. <https://www.sciencedirect.com/science/article/pii/B9780128006351000112>
- Gagné, M., Forest, J., Gilbert, M.-H., Aubé, C., Morin, E., & Malorni, A. (2010). The Motivation at Work Scale: Validation Evidence in Two Languages. *Educational and Psychological Measurement*, 70(4), 628-646. <https://doi.org/10.1177/0013164409355698>
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48-58. <https://doi.org/10.1037/0021-9010.93.1.48>
- Gunnell, K. E., Crocker, P. R. E., Mack, D. E., Wilson, P. M., & Zumbo, B. D. (2014). Goal contents, motivation, psychological need satisfaction, well-being and physical activity: A test of self-determination theory over 6 months. *Psychology of Sport and Exercise*, 15(1), 19-29. <https://www.sciencedirect.com/science/article/pii/S1469029213000848>
- Hagger, M., & Hamilton, K. (2020). General Causality Orientations in Self-Determination Theory: Meta-Analysis and Test of a Process Model. *European Journal of Personality*, 35, 710-735. <https://doi.org/10.1177/0890207020962330>
- Heeger, A. (2024). *Crowdfunding platforms* <https://www.kvk.nl/en/finance/crowdfunding-platforms/>
- Hemer, J., Burghard, U., Dornbusch, F., & Frey, S. (2011). *Crowdfunding und andere Formen informeller Mikrofinanzierung in der Projekt- und Innovationsfinanzierung*.

- Hennessey, B., Moran, S., Altringer, B., & Amabile, T. (2015). Extrinsic and Intrinsic Motivation. In. <https://doi.org/10.1002/9781118785317.weoml10098>
- IBO-Bedrijfsfinanciering. (2024). *Kies voor baten*. Retrieved from <https://open.overheid.nl/documenten/8b5a7681-cd67-40f9-a615-7accde9d7ed6/file>
- Kim-Vick, J., Fiore, A., & Lee, H.-H. (2007). Influences of online store perception, shopping enjoyment, and shopping involvement on consumer patronage behavior towards an online retailer. *Journal of Retailing and Consumer Services*, 14, 95-107. <https://doi.org/10.1016/j.jretconser.2006.05.001>
- Lukkarinen, A., Wallenius, J., & Seppälä, T. (2019). Investor Motivations and Decision Criteria in Equity Crowdfunding <https://ssrn.com/abstract=3263434>
- Manning, K. C., Bearden, W. O., & Madden, T. J. (1995). Consumer Innovativeness and the Adoption Process. *Journal of Consumer Psychology*, 4, 329-345.
- Neil, J. (2015). Introduction to psychology: motivation & emotion. *Centre for Applied Psychology University of Canberra*. https://upload.wikimedia.org/wikiversity/en/6/6f/Lecture_MotivationEmotion_6slidesperpage.pdf
- Nerdinger, F. W. (2006). *Motivierung. Lehrbuch der Personalpsychologie*. Göttingen; Bern; Wien; Toronto; Seattle; Oxford; Prag, Hogrefe: 385–404. .
- O'brien, R. M. (2007). A Caution Regarding Rules of Thumb for Variance Inflation Factors. *Quality & Quantity*, 41(5), 673-690. <https://doi.org/10.1007/s11135-006-9018-6>
- Olsson, O. (2024). *How do backers manage investment uncertainty in equity crowdfunding?* (Publication Number 2024:05) [Doctoral thesis, comprehensive summary, Blekinge Tekniska Högskola]. DiVA. Karlskrona. <http://urn.kb.se/resolve?urn=urn:nbn:se:bth-26056>
- Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. P. (2011). Crowd-funding: Transforming customers into investors through innovative service platforms. *Journal of Service Management*, 22, 443-470. <https://doi.org/10.1108/09564231111155079>
- Ozinga, J. (1999). *Altruism*. Bloomsbury Academic. <https://books.google.nl/books?id=tgayk0UmRfQC>
- Peduzzi, P., Concato, J., Kemper, E., Holford, T. R., & Feinstein, A. R. (1996). A simulation study of the number of events per variable in logistic regression analysis. *Journal of Clinical Epidemiology*, 49(12), 1373-1379. <https://www.sciencedirect.com/science/article/pii/S0895435696002363>
- Perlovsky, L., Bonniot-Cabanac, M.-C., & Cabanac, M. (2010). Curiosity and Pleasure. <https://doi.org/10.48550/arxiv.1010.3009>
- Pierrakis, Y., & Collins, L. (2012). The venture crowd: Crowdfunding equity investment into business. *Nesta*. https://www.researchgate.net/publication/299267756_The_venture_crowd_Crowdfunding_equity_investment_into_business
- Putney, H., Silver, S., Silvia, P. J., Christensen, A. P., & Cotter, K. N. (2024). Why does Creativity Foster Well-Being? Autonomy, Competence, and Relatedness during Everyday Creative Activities. *Journal of Research in Personality*, 113, 104552. <https://www.sciencedirect.com/science/article/pii/S0092656624001004>
- Riffenburgh, R. H., & Gillen, D. L. (2020). 17 - Logistic regression for binary outcomes. In R. H. Riffenburgh & D. L. Gillen (Eds.), *Statistics in Medicine (Fourth Edition)* (pp. 437-457). Academic Press. <https://www.sciencedirect.com/science/article/pii/B9780128153284000176>
- Robert B, C. (2010). *Die Psychologie des Überzeugens: Ein Lehrbuch für alle, die ihren Mitmenschen und sich selbst auf die Schliche kommen wollen*. https://www.ciando.com/img/books/extract/3456757204_lp.pdf
- Rodriguez-Ricardo, Y., Sicilia, M., & López, M. (2018). What drives crowdfunding participation? The influence of personal and social traits. *Spanish Journal of Marketing - ESIC*, 22(2), 163-182. <https://doi.org/10.1108/sjme-03-2018-004>
- Rogers, E. M., & Shoemaker, F. F. (1971). *Communication of Innovation: A Cross-Cultural Approach*. 2nd Edition.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54-67. <https://www.sciencedirect.com/science/article/pii/S0361476X99910202>
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2018). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Publications. <https://supernova5.weebly.com/uploads/8/3/9/2/83922948/self-determination-theory-basic-psychological-needs-in-motivation-development-and-wellness-ryan-ric-hard-m-%E8%91%97-deci-edward-l-z-lib.org.pdf>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://www.sciencedirect.com/science/article/pii/S0361476X20300254>
- Ryu, S., & Kim, Y.-G. (2018). Money is not everything: A typology of crowdfunding project creators. *The Journal of Strategic Information Systems*, 27(4), 350-368. <https://www.sciencedirect.com/science/article/pii/S0963868717300914>
- Schwienbacher, A., Larralde, B. (2010). Crowdfunding of Small Entrepreneurial Ventures. *HANDBOOK OF ENTREPRENEURIAL FINANCE*, Oxford University Press, Forthcoming. <https://ssrn.com/abstract=1699183>

- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A Measure of Intrinsic, Extrinsic, and Amotivation in Education. *Educational and Psychological Measurement*, 52(4), 1003-1017. <https://doi.org/10.1177/0013164492052004025>
- van den Berg, S. M. (2024). *Analysing Data using Linear Models*. https://bookdown.org/pingapang9/linear_models_bookdown/
- Vansteenkiste, M., Niemiec, C. P., & Soenens, B. (2010). The development of the five mini-theories of self-determination theory: An historical overview, emerging trends, and future directions [Article]. *Advances in Motivation and Achievement*, 16 PARTA, 105-165. [https://doi.org/10.1108/S0749-7423\(2010\)000016A007](https://doi.org/10.1108/S0749-7423(2010)000016A007)
- Vismara, S. (2019). Sustainability in equity crowdfunding. *Technological Forecasting and Social Change*, 141, 98-106. <https://doi.org/10.1016/j.techfore.2018.07.014>
- Wasiuzzaman, S. L., Chong Lee; BOON, Ong Hway y CHELVAM, Hemalatha Pannir. (2021). Examination of the Motivations for Equity-Based Crowdfunding in an Emerging Market. *Journal of theoretical and applied electronic commerce research*, 16(2), 58-86. <https://doi.org/10.4067/s0718-18762021000200105>
- Wyman, O. (2023). *Creating the best SME debt Finance Ecosystem* Rijksoverheid Retrieved from <https://www.rijksoverheid.nl/documenten/rapporten/2023/10/02/dutch-sme-debt-finance-ecosystem>
- Zhang, H., & Chen, W. (2019). Backer Motivation in Crowdfunding New Product Ideas: Is It about You or Is It about Me? *Journal of Product Innovation Management*, 36(2), 241-262. <https://doi.org/10.1111/jpim.12477>

9. APPENDIX

9.1 Example e-mail (English):

Subject: Research Collaboration – Understanding Investor Motivation in Equity Crowdfunding

Dear (Platform Name) Team,

I am conducting academic research on the motivations of equity-based crowdfunding investors in the Netherlands and would love to collaborate with your platform. My study aims to provide insights into the intrinsic and extrinsic motivations of Dutch investors that influence their investment decisions.

Would it be possible to distribute my survey among your investor community? I would be happy to share a summary of my key findings after the research with your platform, which could be valuable for understanding investor behavior. Please let me know if we can discuss this further. I appreciate your time and consideration.

With kind regards,

Kim Hartemink
University of Twente

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9.2 Table 2: Survey Questions

Table 2: Survey Questions

Motivation Questions (Likert scale)

Creation, Innovativeness	I like to be creative and try new and different things	Rodriguez-Ricardo et al. (2018)
	I invest in this crowdfunding campaign because I want to be part of a creative/innovative company.	
Curiosity	Investing in this crowdfunding campaign will satisfy my sense of curiosity.	Wasiuzzaman et al. (2021)
	I am curious to see how this equity-crowdfunding campaign and its product/service will develop over time.	
Enjoyment	Investing in equity-crowdfunding campaigns is exciting.	
	I enjoy investing in equity crowdfunding campaigns.	
Trust	If I invest in this campaign, I feel confident that my money will be used wisely by the entrepreneur/SME.	Wasiuzzaman et al. (2021)
	I want to feel sure that the team in the equity crowdfunding campaign I invest in knows what they are doing.	Wasiuzzaman et al. (2021)
Altruism	If I invest in this equity-crowdfunding campaign, I will be helping the entrepreneur/SME.	Ryu & Kim (2018)
	I want to help this equity-crowdfunding campaign even at some cost to myself.	Bretschneider et al. (2014)
Reciprocity	Because I have received support from others in the past (through crowdfunding), I feel motivated to invest in other equity crowdfunding campaigns.	
	I feel that investing in this equity-crowdfunding campaign will help me and others.	Rodriguez-Ricardo et al. (2018)
Financial profit	My main goal by investing in equity-crowdfunding campaigns is to make a return on investment.	Wasiuzzaman et al. (2021)
	I invest in this equity-crowdfunding campaign because there will be an early benefit.	
Personal need	I am interested in investing in this equity-crowdfunding campaign because the product or service meets a personal need of mine.	
	If I invest in this equity-crowdfunding campaign, I can modify the product/service to my needs.	Bretschneider et al. (2014)
Recognition	It benefits me to show people that I have invested in this equity-crowdfunding campaign.	Bretschneider & Leimeister (2017)
	I feel part of a community when I invest in equity-crowdfunding campaigns.	Wasiuzzaman et al. (2021)

General Questions (MC)

	Do you invest, or have you ever invested in equity-based crowdfunding?	
	Do you intend to invest in an equity-based crowdfunding campaign in the future?	
	What is your age?	Ryu & Kim (2018)

What is your gender?	Ryu & Kim (2018)
What is your nationality?	
<u>Background Experience Questions (MC)</u>	
How long have you invested in equity crowdfunding campaigns?	Wasiuzzaman et al. (2021)
What percentage of all types of crowdfunding campaigns you invest in are equity-based?	
How often do you invest in equity-based crowdfunding?	
Have you ever raised money for your own start-up through crowdfunding?	

9.3 Table 3: Descriptive Statistics

Categorical Variables

Variable	Distribution
Experience	Yes: 16, No: 13
Int_Invest	Yes: 19, No: 10
AgeGroup_old	18-30: 15, 30-50: 2, 50+: 12
AgeGroup	18-30: 15, 30+: 14
Gender	Man: 19, Woman: 10
Nationality	Dutch: 29
For how long	<1 year: 13, >10 year: 3, 1-5 year: 8, 5-10 year: 2
How many times	Once a year: 4, Once a month: 1, Once every few months: 6, Several times a month: 1, Less than once a year: 2, Not done yet: 13, When I see something appealing: 2,
Percentage_equitycrowdfunding	<25%: 21, 25% - 50%: 2, 75% - 100%: 1
Own_startup	Yes: 3, No: 26

Continuous Variables

Variable	Mean	SD	Min	Max
Creation/Innovativeness_1	4.28	0.84	2.0	5.0
Creation/Innovativeness_2	3.55	0.91	1.0	5.0
Curiosity_1	3.86	0.74	2.0	5.0
Curiosity_2	4.17	0.89	2.0	5.0
Enjoyment_1	3.66	0.97	1.0	5.0
Enjoyment_2	3.38	0.9	2.0	5.0
Trust_1	4.1	0.98	2.0	5.0
Trust_2	3.79	0.9	2.0	5.0
Altruism_1	4.17	0.85	2.0	5.0
Altruism_2	3.17	1.07	1.0	5.0
Reciprocity_1	2.69	1.26	1.0	5.0
Reciprocity_2	4.03	0.78	2.0	5.0
Financialprofit_1	3.9	0.9	2.0	5.0

Financialprofit_2	2.83	1.26	1.0	5.0
Personalneed_1	2.83	1.1	1.0	5.0
Personalneed_2	2.38	1.05	1.0	4.0
Recognition_1	2.45	1.06	1.0	4.0
Recognition_2	3.07	1.13	1.0	4.0
Creativity	3.91	0.71	2.0	5.0
Curiosity	4.02	0.65	3.0	5.0
Fun	3.52	0.81	1.5	4.5
Trust	3.95	0.76	2.5	5.0
Altruism	3.67	0.79	2.0	5.0
Reciprocity	3.36	0.65	2.0	4.5
Profit	3.36	0.92	1.5	5.0
Need	2.6	0.96	1.0	4.0
Recognition	2.76	1.01	1.0	4.0

9.4 Table 4: Spearman Correlation Matrix of All Used Variables

Variable	Creativity	Curiosity	Fun	Trust	Altruism	Reciprocity	Profit	Recognition	Need	Age Group	Experience	Int_Invest
Creativity	1.00	0.45	0.17	0.40	0.43	-0.07	-0.07	-0.14	0.10	0.38	0.25	0.03
Curiosity	0.45	1.00	0.59	0.27	-0.12	-0.08	0.17	-0.01	-0.08	0.24	0.12	0.25
Fun	0.17	0.59	1.00	0.05	-0.00	0.00	0.40	-0.25	-0.22	0.27	0.36	0.02
Trust	0.40	0.27	0.05	1.00	0.25	-0.08	-0.16	0.17	0.05	0.26	-0.16	0.16
Altruism	0.43	-0.12	-0.00	0.25	1.00	0.43	-0.02	0.11	0.26	0.16	0.09	0.04
Reciprocity	-0.07	-0.08	0.00	-0.08	0.43	1.00	0.34	0.42	0.61	-0.25	-0.31	0.04
Profit	-0.07	0.17	0.40	-0.16	-0.02	0.34	1.00	0.09	0.29	-0.28	-0.08	0.13
Recognition	-0.14	-0.01	-0.25	0.17	0.11	0.42	0.09	1.00	0.50	-0.23	-0.39	0.12
Need	0.10	-0.08	-0.22	0.05	0.26	0.61	0.29	0.50	1.00	-0.39	-0.35	-0.06
Age Group	0.38	0.24	0.27	0.26	0.16	-0.25	-0.28	-0.23	-0.39	1.00	0.59	0.41
Experience	0.25	0.12	0.36	-0.16	0.09	-0.31	-0.08	-0.39	-0.35	0.59	1.00	0.22
Int_Invest	0.03	0.25	0.02	0.16	0.04	0.04	0.13	0.12	-0.06	0.41	0.22	1.00

Values represent Spearman correlation coefficients. The correlation ranges from -1 to 1. Values closer to 1 indicate a strong positive correlation, values closer to -1 indicate a strong negative correlation, and values near 0 suggest no correlation.