Why don't you want my help? Understanding the Role of the Implicit Need for Autonomy on Accepting Help in Times of Financial Hardship.
Henriod, Pavit

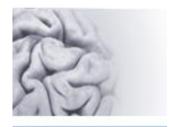# Why don't you want my help?

Understanding the Role of the Implicit Need for Autonomy on
Accepting Help in Times of Financial Hardship.

Pavit Henriod

In collaboration with Selomi Koster, Isabel Mendez Blanck-
Conrady and Jane van den Heuvel

Index

Table of Contents

Abstract

Background: Autonomy, defined as the perception that one's outcomes and actions are determined by personal thought and free will, exerts a substantial influence on human interactions with their environment. This study focuses on how our need for autonomy may act as a barrier to demanding financial help when one is in debt to a person or company.

Methods: A regression study was conducted, amongst 91 participants who were either currently enrolled in or had recently finished university (mean age = 22.64). A participant's implicit need for autonomy was measured with the Picture Story Exercise (PSE) and was used to predict whether a participant would accept help from a debt relief company, whilst being primed with a debt/financial scarcity scenario.

Results and conclusion: The confirmatory analysis yielded non-significant results. Despite the results being non-significant a negative correlation was observed between the need for autonomy and help acceptance. A couple of methodological issues may have accounted for a lack of replication The confirmatory analysis did reveal a strong predictive effect of shame on help acceptance when indebt.

Layman's abstract

When people experience debt they may be limited in their options. They may not be able to afford the car or house they want or may not be able to take a vacation when they want one. This shows that possessing debt can hinder one's autonomy, where autonomy refers to an individual's ability to make decisions and take action by their own free will. Autonomy allows individuals to pursue their own goals without being influenced or coerced by others. The present article looks into whether people with a high need for autonomy (thus they have low autonomy as they have a high need for it) will accept financial help when they are in debt as they might feel like they may not have the will or motivation to tackle the hurdle of getting out of debt by themselves.. The need for autonomy was measured through a creative exercise where participants have to create stories based on a picture prompt and were then coded for autonomous cues based on the Origin Scoring System, and the help acceptance variable was measured through a set of four questions. To mimic a debt scenario, participants were asked to vividly remember the last time they experienced financial issues or were presented with a scenario in which they had to imagine themselves. They were then presented with a letter addressing an overdue amount to prime debt in the participants. The results were insignificant in showing that people with a high need for autonomy were less likely to accept financial help offered to them when they are experiencing debt. Overall no definitive conclusions could be drawn from the study due to it being non-significant and encountering a couple issues in how the study was conducted.

Introduction

My parents and grandparents always told me one thing when it comes to money, 'Never borrow and don't get in debt'. Possessing has been generally avoided in past generations (International Monetary Fund, 2022). The experience of debt can be differentiated between classic debt and student debt. Where classic debt may be acquired to start a business, buy a house, a car, or even credit card debt. Student debt is structured very differently from country to country. For example, Student debt in the Netherlands has a very low-interest rate compared to more classic debt, which means that student debt does not put as much urgency towards repaying the debt immediately (Interest-DUO, n.d.). This may lead students to neglect their debt as it continues to compound over time. With the increasing number of undergraduate students each year (Hanson, 2023a), it is becoming increasingly common to take out loans and be in debt from a young age to attend higher education (Hanson, 2023).

The mere presence of debt is still a potential future stressor as it continues to increase every year resulting in a debt due which may have been accounted for by the creditor (students). Some of the future consequences of owning debt include increased psychological pressures asserted as debt builds over time (Martela & Ryan, 2016), decreases in general life satisfaction and wellbeing (Achtziger, 2022), and overall general health decrease leading to an increased daily perceived stress, and feelings of depression (Sapolsky, 2004; Sweet et al., 2013). These are just some of the personal consequences of debt, however, as debt compounds it can generally grow out of control over time. A study has shown how in India some households have resorted to selling kidneys and blood to make debt payments (Goyal et al., 2002). Additionally in the US, more and more African American households are getting

visited by debt collection agencies purely due to medical debt (Casilla-Lennon et al., 2018; Wiltshire at al., 2016). All of these consequences highlight the dangers of debt and how it must be used properly to ensure longtime psychological and general well-being.

This results in statistics showing how money and scholar loans are one of the main stressors for Americans as everyone tries to achieve academic success and gain a higher education certification (Clay, 2011). Very little research exists on debt outside of the US, as consumer debt is much more common in the US with the average household using 10% of their monthly spending power on debt repayment (*Debt In America: Statistics and Demographics*, 2023).

This is only the first half of the current issue, as over the years many services have emerged that aim to help individuals get a grip on their financial situations and chip away at their debt reasonably. These institutions have been put in place as more and more people are acquiring debt for a variety of reasons and sometimes people overlook the long-term effects of debt (Clayton et al., 2015). Despite these institutions being put in place to help people, they are infrequently used as people generally prefer to deal with their finances individually (Elliehausen et al., 2007). People choosing to deal with finances individually could be influenced by an individual's autonomy. If one is highly autonomous they may feel like they can act on their own and may not need to accept others' help, whereas individuals who have a higher need for autonomy may be more likely to accept help when offered. This paper will focus more on students and the debt they acquire at a young age to see if their likeliness to accept financial help can correlate to their implicit need for autonomy.

Simply having high autonomy may indicate that the individual may feel more comfortable with handling situations themselves as research has indicated that individuals with a low need for autonomy are less likely to ask for help (Pumpa and Martin, 2016;

Nguyen et al., 2021). Thus individuals with a lower need for autonomy are less likely to accept help, however, it does not mean that they have the skills and knowledge to get out of debt in the case of financial scarcity. Which is why it is important to study the link between the need for autonomy and accepting help when facing financial scarcity as it could greatly impact someone's financial future.

Theoretical Background

We generally like to think that we are in charge of our actions and decisions. If I do something it is because I want to. This innate feeling that I can take charge of my actions and freely determine how I think and act freely of any psychological or financial barriers is referred to as autonomy (Deci & Ryan, 1987). Thus our need for autonomy is how strongly we feel the urge to take control of our lives and our actions.

Prior research looking at autonomy and help acceptance has generally been conducted in the medical field, concerning how autonomy plays a role in seeking expert medical help (Pumpa and Martin, 2016; Nguyen et al., 2021). The results of the prior studies indicated that a negative correlation exists between autonomy and help-seeking behaviors, in other words, the more autonomous a person was the less likely they were to seek out help. Underlid (2012) also carried out research on autonomy regarding people of lower socio-economic status, their findings indicated that when facing financial scarcity, individuals have a sort of tunnel vision that restricts them from seeing other opportunities available to them as opposed to being stuck in the negative spiral of consequences due to debt. This inherently reduces their autonomy and as a consequence, it may have resulted in a sub-adequate decision-making process there in limiting their perception of the options available.

Despite most people having access to such services, rarely do people ever engage with these agencies when they are experiencing debt as they are unaware of such companies

(Dobbie & Song, 2020). As mentioned earlier, people have a strong innate need to dictate their actions and behaviors. A strong need for autonomy could lead to potential reasoning as to why people never actually end up asking these companies for help that it may threaten their autonomy, as they may feel that they are unable to accomplish the task of getting out of debt by themselves and their own actions but rather through the use of a service. To get a better grasp of the potential barriers one's need for autonomy may place on help acceptance prior research has dissected the topics of autonomy and help acceptance which will be discussed further below.

Research suggests that the experience of debt may result in constant worries over repaying this debt in the future inducing a financial scarcity mindset (de Bruijn & Antonides, 2021; Huijsmans et al., 2019). Literature in this field has indicated that a scarcity mindset has led individuals to perform behaviors or make choices that would be more detrimental rather than beneficial to their current situation. Examples include developing an evasive coping strategy to deal with stressors (Lever, 2008), neglecting useful information, and overborrowing (de Bruijn & Antonides, 2021). Research has also investigated the effects of financial status on cognition and found that being in a time of financial hardship resulted in a high cognitive load which in turn results in an impaired rational decision-making process (Brownstein et al., 2019). Additionally, prolonged financial scarcity has been found to have a rather taxing effect on one's autonomy (Underlid, 2012).

Possessing debt inherently reduces one's autonomy as the escalating financial pressures to repay the debt builds up month by month whilst possibly preparing for big life events (i.e. marriage, children, first house). Lowenstein and Thaler (1989) illustrate in their study on temporal discounting how people generally tend to prefer to postpone a negative outcome such as losing money. This effect shows the danger of debts as people are naturally more likely to avoid them as they continue to get larger and larger due to people postponing

the immediate loss of money, while discounting the possibility that it will cost them more in the future. Additionally, the pressures of repaying debt limits peoples' possibilities in life to alleviate stress. People who have a debt to worry about may not be able to afford the luxury of taking some money to go for a vacation and escape their day-to-day stressors such as their accruing debt. This would leave the people in debt stuck in their tunnel vision (Underlid, 2012), whereas getting some time off may allow individuals to take time to properly analyse their situation and perhaps gain a new insight on possible solutions.

Our sense of autonomy has a significant effect on our decision-making and well-being. Research by Kasser and Ryan (1999) and Ryan and Deci (2006) reported that more autonomous people report greater psychological well-being, leading to the idea that autonomous people generally may have higher life satisfaction. The obligation to repay debts interferes with autonomy as a large part of our psychological and financial resources are occupied by repaying the debts (Martela & Ryan, 2016; Underlid 2012). This interference of autonomy could lead individuals to gain a larger need for autonomy as time goes on. According to Wilson and Deane (2010) having a higher perceived need for autonomy was associated with a reduced intention to seek help as the sample was primarily adolescents who are emerging young adults and strive to be independent. Having to ask someone for help can be considered a strong loss of autonomy for an individual who is just starting to gain autonomy as a young adult. The same correlation has also been found in other domains, Pumpa and Martin (2015) found that individuals with a high need for autonomy were less likely to seek help concerning emotional health issues or self-harm ideations. The paper compared participants with a history of self-injury and those without a history of self-injury to see if their history and need for autonomy affected their willingness to seek out medical help. Irrespective of self-injury history a strong negative correlation was observed between the need for autonomy and help-seeking behaviors.

The reason why people may be more reluctant to ask for help when experiencing financial hardship can be illustrated by Deci and Ryan's (1980) self-determination theory (SDT) which states that when people have their basic psychological needs of competence, relatedness, and autonomy met that they will act with more autonomous motivation and self-reliance. This theory explains that when an individual believes in themselves and that they have the skills required to achieve a task (competence), when they believe that they feel relatable to others (relatedness), and that they have the belief that they can dictate their future behaviors (autonomy). Then people will act on their own to achieve a goal, when their need for autonomy is threatened then their autonomous motivation is decreased. This reduction in turn decreases the odds that the individuals feel that they can get out of debt by themselves and then may turn to an expert for help.

A distinction has to be drawn between general financial scarcity and being in debt. Until now the two terms have been used slightly interchangeably. In the context of this explanation, financial scarcity refers to not having access to money whereas debt, on the other hand, refers to owing someone or an institution money. With debt not being limited to people of a lower SES (Achtziger, 2022). Research has shown that socio-economic status has relatively little effect on the need for autonomy (Pinquart & Sörensen, 2000). Which is in stark contrast to Underlid's (2012) study indicating that people of a lower SES act less autonomously. This contrast illustrates the importance of understanding the link between the need for autonomy and help acceptance specifically in the context of debt and not financial scarcity as debt can affect any individual regardless of race, sex or SES.

Accepting help from a debt repayment company may seem at first like an autonomous choice. It is easy to assume that an individual wants to take control of their financial life and financial future and so they seek out this company by themselves to get their life back on track. However, it can also be seen as a last resort, the last option left as whatever the

individual has tried has failed and even possibly worsened the situation leading to a further lack of autonomy. This can be exacerbated by the temporal discounting of negative events explained earlier. Hilbert, Noordewier, and Van Dijk (2022) found that the delaying of negative events is even greater during financial hardship. These findings indicate that asking for help is an activity that is postponed over and over as individuals try to regain their autonomy and that asking for help is generally rarely done autonomously and is generally a last resort. Studies have also shown that when participants experience financial hardship they may prefer to suffer personally by their medical condition worsening rather than losing money (Lennon et al., 2018). This goes to show that it is not uncommon to delay the loss of money even at the account of personal well-being.

To summarize, the experience of debt is very taxing on one's autonomy leading them to have a higher need for autonomy. SDT and temporal discounting give the theoretical understanding of why individuals with a high need for autonomy may be more reluctant to seek help to get out of debt even when facing financial scarcity, as they see they have the ability to dictate that they will be able to get out of debt by themselves. Due to this reasoning, it is hypothesized that (HI) A high need for autonomy is negatively correlated to participants demanding financial help when facing financial scarcity.

The current study aims to investigate the relationship between the need for autonomy and accepting financial help when primed with a debt/loss mindset. All whilst examining the use of more updated and modern pictures in the Picture Story Exercise. Lastly, this study aims to further strengthen the understanding between the implicit need for autonomy and accepting help in times of financial hardship. Research has been done in the field of autonomy and help acceptance, however, there is a lack of studies dedicated to investigating the implicit need for autonomy and help acceptance when it comes to finances and facing financial scarcity.

Methods

Design

This research will use a quantitative design due to the nature of the continuous interval variables measured in a between-subjects design. The hypothesis will be tested by measuring and analyzing the variables the *implicit need for autonomy* and *help acceptance* in financial situations.

Participants

According to G*Power 3.1.9.7, to detect a small to medium effect size (Cohen's f^2) of 0.15, with a power of 0.95 at an alpha of 0.05 a minimum of 47 participants were needed for this study. This effect size was drawn from the effect size of the study by Pumpa and Martin (2015) in hopes of replicating their findings.

In total, 91 participants were recruited for the study. The participants for this study were recruited utilizing the Leiden University SONA study recruitment software, additionally, flyers were distributed throughout the social sciences campus of Leiden University to attract more students to the study. All participants were asked at the end to refer any friend who needed credits or was looking to help out fellow student researchers as a means of snowball sampling, There were no restrictions on gender, and financial need (debt) was primed so possessing debt was not a requirement for participating in the study. Since the majority of our participants were recruited at the faculty through being informed by the flyer or the SONA system, it was preferable to not recruit any external participants who have finished their higher education by more than 5 years in time as of the time of testing, additionally, no participants under the age of 16 were recruited for the study. This will aid to keep certain confounding variables such as general understanding (experience) of money (personal finances), and general life experience relatively controlled. People may attend a higher

education by the age of 16 which is why they have been included as qualified participants. Participants who have finished their higher education by more than 5 years or who are less than 16 years of age were not allowed to participate, this is done to have a stricter control on the demographics of the sample. This is of importance as personal finances are never really taught in school and it is more of a self-taught skill, so putting stricter controls on the demographics of the sample will allow for a better control of such possible confounding variables. Of the 91 participants, none of them were excluded for reasons which will be explained in a later section, the mean age was 22.64 (SD = 3.71) and the age ranged from 18 to 36.

Measures

Data for this study was collected through an online survey created on Qualtrics (Qualtrics XM, 2023). The variable *Implicit need for autonomy* and *Help acceptance* was measured while *Debt* was primed in our participants.

Implicit Need for Autonomy. This variable was measured through the Picture Story Exercise (PSE). As mentioned earlier, this study will focus particularly on the implicit need for autonomy. This is due to the evidence which shows that implicit motives are more indicative of spontaneous behavior as well as behavioral patterns (McClelland, 1980; Schäpers et al., 2021). Additionally, explicit motives on the other hand are self-reported and are at greater risk of being answered with socially desirable answers (Dimofte, 2010).

The Picture Story Exercise (PSE) involves participants writing a story based on a picture prompt and it is a measure specifically designed to be sensitive to implicit motives

(Baum & Baumann, 2021). A pilot study was conducted to select the final four images to be used in the PSE in the study[1].

For this study, the participants were presented, one by one, with four different pictures of people performing everyday acts in their personal or professional lives (See appendix A). These images are in a predetermined order to alternate the number of actors in the picture to avoid two pictures in a row with only one actor. The participants then had to create a story based on the picture prompt while being guided with questions such as 'What do they want?" and "What will happen next?". The participants were given 15 seconds to view the image, then they were given 200 seconds to write out their story. After 200 seconds the auto-continue function was triggered, prior to this participants were given an audio cue indicating "You have

---

[1] The sample contained 42 participants of ages ranging from 21 to 64 with a majority of females (69%) in the sample. A sample of 10 stock photos were gathered from stock.com. The selection criteria for the photos required them to be in color as it was decided to include new pictures in this study to build off previous research that has been conducted in this specific domain, which recommended that more modern pictures be used for future research (Oudshoorn, 2022). Additionally the pictures had to cue a sense of autonomy without portraying any overly obvious behavior (there needed to be a sense of open-endedness to allow participants to be creative with the scenario portrayed in the picture). This open-endedness is referred to as set ambiguity, if the context and proceedings of a picture are clearly interpretable in the picture then the set ambiguity is low. This is important as the set ambiguity has important implications for the validity and reliability of the PSE (Ramsay & Pang, 2013). Additionally, the set ambiguity triggered by the modern pictures will be more relevant to modern-day society, allowing participants to have a better understanding of the picture and scene to write a better and more appropriate continuation of the scene. The 10 pictures were then divided into two separate surveys, as they do require some time to complete they were separated to not cause fatigue and be attentionally draining to participants which would affect the reliability and validity of the pilot study. The pictures were divided to include an equal amount of pictures with either one or two people in the pictures, as some pictures only included one actor (man on the phone, man fixing car, and woman in an interview) and some had multiple actors (couple on a bench, couple in a car, and two friends sitting on the stairs) The final four pictures included two men hunting, a man trying to fix his car, a girl looking out the window, and a couple on a hike. They were selected based on which picture had the greatest variance in score and two which displayed the sense of help-seeking the most. The picture of the men hunting and the couple hiking both had the highest variance in scores with 3.02 and 2.03 respectively. The remaining two pictures were selected because of the set ambiguity of the pictures.

All the pictures in the sample have an open license (CC0, CC-BY, or CC-BY-SA), so they are free and safe to use for research purposes.

30 seconds left, please make sure you finish your last sentence now". When one story was completed, the next picture was then shown on the screen.

The stories were then coded and scored to measure the characters' autonomy in the story written (Schultheiss, Liening, and Schad, 2008; Schultheiss and Pang, 2007). The stories were coded based on the Origin Scoring System (DeCharms & Plimpton, 2009). The system was broken down into six different characteristics: Personal causation (Does the character in the story show signs of being an agent in their surroundings, that they are aware that they affect what goes on around them?), Goal-setting (Did the character in the story explicit state or create a goal for themselves?), Instrumental activity (Did the character in the story take any action in the present tense towards achieving a goal?), Reality perception (Did the author show signs of taking reality into account? Did characters respond to environment cues or did they show any activities which are typically observed in a realistic scenario like planning?), Personal responsibility (Did the character in the story show signs of taking responsibility when an event occurred?), and Self-confidence (Did the character show any signs of confidence in themselves or did the story have a happy ending?) When the story characteristic was met it was scored with a 1 if it was not present in the story it was scored 0 for that characteristic. This results in a scale of 0-6 for each story, with a higher score representing a higher need for autonomy.

When scoring stories according to ambiguous categories such as reality perception and personal causation it was important to have each story be scored by two different trained scorers in the Origin Scoring System (Schultheiss and Pang, 2007). The training procedure lasted 2 months and each rater had a list of training scenarios to score, these training scenarios were given with the Origin Scoring System in order to get familiarized with the different scoring categories.

The scorers first each score all the stories for a given picture individually according to the scoring system described above (DeCharms & Plimpton, 2009), then two scorers discussed each story and came to an agreed upon final score for each picture, not per category. These final scores discussed between scorers were used to calculate the mean Need for autonomy in the main analysis then discussed and the interrater score had to be agreed upon prior to moving to the next picture for scoring. This approach explained was taken rather than scoring all the stories of participants (for pictures 1, 2, 3, and 4, then moving on to the next participant) as was requested in the scoring guidelines of DeCharms & Plimpton, 2009.

The average score of the participants in the data set was 2.1 (*SD* =.79). The Cronbach's α calculated for this scale was .59, which is slightly on the lower end of what feels comfortably reliable. Given that there are only 4 items in this scale does give it a bit of leeway, but the lack of intercorrelation between the items is what draws this scale down in terms of reliability (Cortina, 1993). This low internal reliability score also stems from the use of the overall picture scores used as items for the reliability analysis. The use of the scores for each scoring category (PC, GS, IA, RP, PR, SC) as items in the reliability analysis would have provided more accurate internal reliability for the scale (Gruber & Kreuzpointner, 2013). This is not possible in this case as an overall score for each individual category was not discussed but rather an overall score for each participant's score per picture was discussed. Using the scores of individual raters as scores for the items may raise certain interrater reliability issues.

There was a generally low score in agreeance between scorers, $\kappa = .082$-.29. The picture with the highest interrater reliability scored relatively low with a benchmark of .45 for low agreeance for this scale. The consequence of such low interrater reliability is reflected in the validity of the scale. Knowing this it is important to keep in mind that the scores given by the PSE may not accurately represent a participant's *need for autonomy* (McHugh, 2012).

Debt. This concept was primed in the participants during the survey. Participants were prompted with a question asking if they could vividly remember a situation from their recent life where they have experienced financial scarcity. If they had then they were prompted to describe this experience in a short paragraph. The participants were asked to describe the experience in as much detail as they remember and were comfortable with disclosing. If they could not recall such an experience they were presented with the following text and asked to read it whilst trying to picture themselves in that situation: "Last January you moved into your new apartment which was not furnished. You had to dip into most of your personal savings to furnish your apartment. You had a lot of big purchases to make like a fridge, a desk, and chairs. You had just enough left to pay your rent. Having nothing left, you had to survive on instant ramen and pasta for a couple weeks. However, you had forgotten that municipal taxes are due this time of the year and you had spent all your savings on your new apartment. Living alone with no one to help out with taxes and the increasingly expensive electric bills, you were stuck in a situation where you had to choose to either pay your taxes or your electrical bill. " This text in particular was created by a member of the team and was among one of the three scenes drafted which were voted upon by the rest of the team. The scenarios were drafted based upon certain key points which were given based on the responses of participants from a previous study. The rationale behind this scene specifically is that it provided a realistic scenario that could very well happen to most students. The story crucially needed to be relatable for the sample so that they could picture this scene as vividly as possible if it were happening to them.

Subsequently, the participants were given a fictional letter that was drafted to be realistic. The letter addressed the participant as a letter of notice for an overdue unpaid rent. The letter included that the participant had an overdue amount equal to three times their rent and if it was not payed back by a certain date then it would be handed over to a bailiff where a

surcharge interest of up to 20% could be added to the overdue amount. The letter concluded by informing the participant that if they are unable to meet this demand then they could contact the housing service either by the phone number or email provided at the end of the letter (see Appendix C).

Help acceptance was measured using a custom-created questionnaire designed to test a participant's willingness to accept financial help. Participants then answered questions such as: "How likely are you to answer the phone when the company tries to contact you?", "How likely are you to reach out to the company to consult on what steps to take?" and "How likely are you to reach out to the company by phone or by e-mail?" on a 7-point Likert scale ranging from "extremely unlikely" = 1, all the way to "extremely likely" = 7, with the last question being reverse coded as the question was framed in a negative way rather than a positive manner like the other three questions: "How likely are you feel negative about reaching out for help?". This measure is structured so that a higher score indicates a greater likelihood to accept help. The average help acceptance score of participants in this data set was 4.37 ($SD =$ 1.14). This scale resulted in a Cronbach's α of .62, which is straddling the level of comfort at the lower end of the scale, however, there are a few particularities about this scale that make this alpha coefficient more reasonable. Namely having a low number of items (4) and a relatively high intercorrelation between the items (Check appendix D) (Cortina. 1993)

Procedure

Participants were asked to show up at the laboratory facilities of the Social Sciences Faculty of Leiden University. Participants had either agreed upon a time to show up through the online SONA recruitment software or had just shown up due to either snowball sampling or they had seen one of the flyers posted around the campus. When they arrived in the laboratory they were assigned a small closed off cubicle with a PC inside.

Once they had sat down and were ready to start, first and foremost, the participants were asked to sign a letter of informed consent before starting the testing procedure. The letter of consent gave the participant an overview of the topic of the study, giving them an idea of what will be asked and what we will be testing for with our study. Once the written consent is signed, the participants are then prompted to start the testing process.

When the participants start the testing process they first started with an attention check. On the information page, they were asked to type the word "puce" as the answer to the following question. Participants were then asked "What is your favorite color?" if they replied with anything other than "puce" then they were reminded to please pay close attention to all the information given in the questionnaire.

Once the attention check had been completed the participants were given the PSE through the online questionnaire software. Once the PSE had been completed, the next part of the testing process involved filling in the online questionnaire comprising the help acceptance scale and general demographic questions. Before answering these questions the participants were presented with the debt priming scenario where they were asked to recall a time when they were in debt. Straight after they were presented with a letter reminding them of an overdue amount to be paid. Participants then answered the questions on the help-acceptance scale.

Once the participants completed the survey they were prompted with a page where they were debriefed on the study. The debriefing went briefly over some important information that was outlined in the briefing as well as properly go over the nature of the study and what we will intend to do with the data collected. Once the participants have been debriefed their personal information was collected to make the bank transfer and if they had opted to receive their compensation in the form of study credits, the credits were awarded to their university student number through the use of the SONA recruitment software.

Statistical analysis

When all the data was collected, the picture story exercise was coded by analyzing the stories given by the participants and scoring them on how autonomously the character in the stories were behaving. These scores were then transferred into SPSS (version 29, IBM, Chicago, IL, USA). The results from the *Help Acceptance* scale were also recoded in SPSS, as the results of the scale came out on a different scale (15-21) instead of a 1-7 scoring system. In the end, nothing changed in the values of the scale, the values were simply changed to increase the legibility of the data. Additionally the last item of the *Help Acceptance* scale had to be reverse coded as it was framed in a negative way as opposed to the other three items.

Once the data is in SPSS before starting any analyses the data was scanned for incomplete answers or stories and a basic outlier analysis was conducted to identify any extreme cases within the sample. Subsequently the Cronbach's alpha for each scale was calculated followed by the interrater reliability, Cohens' kappa. Once the preliminary calculations are completed the main analysis will be conducted.

A regression analysis was run between the *implicit need for autonomy* and *help acceptance*. Before starting the analysis there was a check whether the assumptions of linearity, normality, and homoscedasticity are met. If the assumption of normality is violated then a non-parametric test like Spearman's rho will be utilized in this analysis. Whereas if the assumption of linearity or homoscedasticity is violated then measures will be taken to try to transform the variables to meet the assumptions of linear regression.

Results

Confirmatory analysis

For the main confirmatory analysis, a regression analysis was performed to predict a participant's *help acceptance* score based on their score on *the need for autonomy*. As stated

above the PSE provides a reliable and valid numerical representation of a participant's implicit need for autonomy. A regression analysis between these two variables will give us a much clearer picture of the relationship between the need for autonomy and help acceptance. Below are the relevant descriptive statistics for both variables followed by all the preliminary checks conducted before running the confirmatory regression analysis.

Assumptions check

None of the assumptions of linear regression were violated. The assumption of normality was violated according to the Shapiro-Wilks test. However, according to Mishra et al. (2019), the Shapiro-Wilks test becomes too sensitive with a large sample. However, the Q-Q plot of the standardized residuals against the standardized predictors seems to follow a rather straight line thus it was concluded that the assumption can be met with relative confidence .

An analysis of the residuals was conducted and reported the outliers of importance. A maximum Cooks distance of 0.098 was observed which indicates that there are no outliers of significant importance using the rule of thumb of any cooks distance greater than 0.5 warranting extra attention.

Removing participants

None of the 91 participants were excluded from the study. As stated above there were no significant outliers to be dealt with. 9 total data entries were excluded from the data set but they do not represent an individual participant it was the result of a participant clicking the wrong box at the beginning of the survey ending their session prematurely so they had to open a new entry. Another point of interest regarding the exclusion of participants is the attention check conducted before the PSE. If the participants had failed the attention check they were simply reminded to pay good attention to instructions given in the further exercises. A total of

six participants failed to complete the attention check correctly and were not excluded from the analysis.

Confirmatory Analysis

To test the hypothesis a simple linear regression was conducted to predict help acceptance with the help of the implicit need for autonomy. The model resulted in a non-significant regression equation ($F(1;89) = .664$, $p = .42$), with an R^2 of .007 resulting in a Cohen's f^2 of 0.088, which indicates a relatively small effect size. In this model, the need for autonomy was a non-significant predictor of help acceptance when facing financial scarcity $\beta = 0.086$, $p = .42$, 95% CI [-0.18, 0.43]. In the model, each incremental increase in the PSE accounted for an increase of 0.12 in the predicted help acceptance score. It is still important to note that these results are non-significant but it is purely to demonstrate the limited predictive effect of the need for autonomy on help acceptance.

Exploratory Analysis

Additionally, an exploratory analysis was conducted following the main confirmatory analysis. First and foremost a range of variables were included to see if there is any effect in controlling for gender, age, and income and all models resulted in a non-significant regression equation.

The exploratory analysis took a deeper look at how shame fits into the model proposed above. *Shame* is a very strong negative sensation that can have great inhibitory effects. I'm sure we can all remember a time when we were kids and did something naughty and did not speak out about it when our parents confronted us due to the feeling of shame. Landers and Sznycer (2022) found that shame can lead to disengagement of available information. Based on this rationale it was of interest to include shame as an exploratory analysis to examine whether this negative sensation could have possibly inhibited participants from asking for help when

facing financial scarcity. Shame was measured in our sample using a scale comprised of four questions measured on a 7-point Likert scale. The scale comprised of questions regarding a participants shame towards experiencing financial scarcity and were asked to rate how they felt based on some of the following prompts "I feel that others look down on me because of my financial situation" and "I feel as if I have failed as a person". The average score for the scale was 4.54 (SD = 1.44), with a Cronbach's α = .89.

Shame

To explore the effect of *shame* on *help acceptance* a multiple linear regression was conducted to predict help acceptance based on the implicit need for autonomy and shame. The analysis resulted in a significant regression equation ($F(1;88) = 69.28$, $p < .001$), with an R^2 of .17, resulting in a Cohen's f^2 of 0.45. A participant's *help acceptanc*e score is equal to 5.49 + 0.17 *(implicit need for autonomy)* - 0.33 *(shame)*, when the *implicit need for autonomy* is measured with the origin scoring system. The interaction effect between these two predictive variables was also calculated and included in a second step of the regression analysis. However, the interaction came back as non-significant ($\beta = 0.064$, $p = .54$, 95% CI [-0.16, 0.3]) so it was excluded from the regression equation. A participant's help acceptance score increased by 0.17 with each increase in unit on the origin scoring system and further decreases by 0.33 with each unit increase on the shame scale. It is important to note that shame was the only significant predictor in the model ($\beta = -0.41$, $p < .001$, 95% CI [-0.48, -0.17]) whilst the need for autonomy remained a nonsignificant predictor in the model ($\beta = 0.12$, $p = .32$, 95% CI [-0.11, 0.45]).

Discussion

The research aimed to examine the relationship between the implicit need for autonomy and help acceptance when facing financial scarcity. It was hypothesized that a

greater implicit need for autonomy would predict a lower score of help acceptance when experiencing financial scarcity as opposed to a lower score on the implicit need for autonomy.

Interpreting the results

The results of the analysis did not yield statistically significant findings, thus failing to replicate the results reported by Pumpa and Martin (2016), Nguyen et al. (2021), Wilson and Deane (2010), and Underlid (2012);. Consequently, it cannot be concluded that a correlation exists between the need for autonomy and help acceptance in the context of financial scarcity.

While the research by Pumpa and Martin (2015) and Nguyen et al. (2021) explored help acceptance from a health-oriented perspective. The authors specifically investigated accepting health services for self-harm among adolescents and seeking help for older members of the family, respectively. Finances and health are two widely different subjects, as much as people strive to achieve wellness in both domains we can account for deficiencies in these two domains very differently. There is often a limit as to how much one can help themselves in medical terms, if someone has a severe illness there is often very little that individual can do at home to remedy the situation, and they will often need professional medical help. However, here you can see the role of the need for autonomy, as the individuals who have a high need to believe that their actions are autonomous may believe that they can control their mental health state and consequently accepting help could interfere with their sense of autonomy (Pumpa & Martin, 2015).

When it comes to finances there is a great deal of pride involved (Lea & Webly, 1997). Where individuals may see that if they have fallen into debt then they can dig themselves out of it. Vogel et al. (2007) illustrate this in their study showing how individuals have learned to make their money and thus value their need for autonomy as it has given them the determination to commit to their actions and become successful. When it comes to

financial obstacles, due to their pride it has resulted in them being less likely to accept help when facing financial scarcity. Much like when dealing with medical issues most common people simply do not know how to deal with such issues, yet pride interferes and makes individuals believe that they can control their situation and makes it is less likely that they will seek help from a medical professional.

Another discrepancy that was observed may account for the lack of replication in findings compared to Pumpa and Martin (2015) may be attributed to an unequal approach in terms of methodology and unbalanced gender distributions may have accounted for the lack of replication in our findings. This difference mainly concerns how help acceptance was measured in both studies and will be elaborated upon below.

Both studies employed a similar methodology to measure help acceptance, employing a questionnaire employing a 7-point Likert scale. While Pumpa and Martin (2015) utilized the General Help-Seeking Questionnaire, comprising 30 items divided into three constructs, the help acceptance scale used in this study only contained four items. The reduced number of data points in our help acceptance scale may have compromised its validity, and employing a more extensive set of questions might have been advantageous. It would have been beneficial to have more questions to cover a larger scope of the concept of help acceptance. However, having more questions could also potentially lead to more fatigue in participants completing the study especially when the scale follows the PSE. Additionally, when dealing with financial issues there is generally only a handful of institutions that handle these types of cases. Consequently, our help acceptance scale focused on whether the participants would accept help or contact these institutions through various communications systems. On the other hand, the help acceptance scale used by Pumpa and Martin (2015) focused on accepting help from a variety of different social support systems including friends, family, doctors, and a phone helpline. The scope of coverage provided by the help acceptance scale used by

Pumpa and Martin (2015) generally covers a greater range of help acceptance behaviors and possibilities compared to the scale used in this study. This broader scope of coverage might reveal certain nuisances which may have been overlooked in our study. The help acceptance scale in this study covered whether people would accept help when it was offered in a letter but a greater portion of the effort had to be put in by the person in debt. Questions asking if participants would accept help if it was offered over the phone could provide more insight. As it has been found that pride and shame play a large role in help acceptance (Dayal et al., 2014). As people may not necessarily seek out help even if it clearly presented but are more likely to accept it if it is directly given to them.

While there have been similarities among the help acceptance scales in both studies, there is a great deal of variance when comparing how the need for autonomy was measured. Our study used the PSE which resulted in each participant writing 4 short stories which have to be analyzed according to the Origin scoring system (DeCharms & Plimpton, 2009). This resulted in relying on human assessments of over 200 stories based on a subjective understanding of the scoring system. This is in contrast to Pumpa and Martin (2015) who utilized the need for autonomy subscale of the Barrier to Adolescent Seeking Help Scale (BASH-B). The BASH-B is put together to assess the need for autonomy in adolescents in the health domain. This was a questionnaire measured on a 5-point Likert scale resulting in no need for human error and interpretation. When assessing both methods side by side it is more evident that the measures used by Pumpa and Martin (2015) were very reasonable for their study and the PSE is appropriate to use in the case of this study but it is also heavily affected by the interpretation of the individual assessors of the stories. The consequence of human error and interpretation being involved in the PSE is a low interrater reliability in the case of this study. Such a low interrater reliability has effects on the validity of the scale in our study ("Using the Global Assessment of Functioning Scale to Demonstrate the Importance of Inter-

rater Reliability," 2010). Whereas using a scale with a concrete Likert scoring system would've provided results with less ambiguity,

Furthermore, it is essential to acknowledge that although the dependent variable was referred to as help acceptance, only one item within the scale specifically addressed "acceptance." The remaining items predominantly focused on "help-seeking." These two terms represent distinct concepts that cannot be disregarded. Accepting help implies the act of receiving offered assistance without requiring active effort from the individual, whereas help-seeking necessitates the individual's proactive endeavor to obtain or request help, which is not presented to them on a silver platter. Thus, when individuals are compelled to take action rather than passively accept help, it is plausible that shame plays a significant role in this dynamic (Dayal et al., 2014; Gabler, 2016). The scale used by Pumpa and Martin (2015) also used more help-seeking rather than help-accepting, but a distinction that has been added in particular is between formal and informal. As perhaps help-seeking and help-accepting may interact differently when it comes to a formal vs. informal situation. The article did not specify any interaction effect in their discussion, but it would be of great interest to see this dynamic in a financial context.

The exploratory analysis examined the role shame can play in our regression model. Shame is a strong emotion with a powerful influence on our behavior. Several sources have indicated that people who experience financial scarcity are ashamed of their situation when thinking about it or talking about it with others (Gabler, 2016; Engel & Pedersen, 2019). Shame was found to be a significant predictor of help acceptance within the regression model. This would indicate that emotions play a large role in the decision-making process leading to help acceptance. Conclusions cannot be drawn solely from this exploratory analysis however it does support the finding by Pumpa and Martin (2015) where they found that emotions fully mediated the relationship between autonomy and help acceptance.

Strengths and limitations

The research was conducted within the laboratory testing facilities of the social sciences faculty at Leiden University. This controlled setting offered a neutral and stimulus-free environment, thereby enabling enhanced control over confounding variables that could have exerted greater influence if participants had completed the questionnaire online at home or in their respective offices.

Furthermore, this research setup facilitated a deeper understanding of human behavior within a non-laboratory context. By employing implicit measures rather than explicit measures, the study ensured the assessment of participants' underlying need for autonomy, thereby providing a more accurate depiction of their potential interactions with the world. It is worth noting that implicit motives have been shown to be superior predictors of behavior compared to explicit motives (McClelland, 1980). Utilizing an explicit measure could have potentially resulted in participants providing socially desirable responses (Steenkamp, 2010)

Another notable strength of this research was the utilization of updated and modernized pictures in PSE. The original pictures used in the PSE exhibited limitations due to their reduced comprehensibility relative to contemporary photography standards. In an era where individuals possess smartphones capable of capturing high-quality photos and videos, presenting participants with black-and-white pictures containing out-of-focus details has resulted in less motive cue words in previous research (Lang, 2014; Tuerlinckx et al., 2002). These studies used a different scoring system regardless the use of more modern pictures elicited a significantly higher number of words describing implicit motives. The pictures employed in the present study offered clear depictions of characters and settings, enabling participants to immerse themselves more fully in the images and potentially enhancing their creativity. Schonbrodt (2021) provided some of the updated pictures which were taken into consideration during the pilot study. An important message brought up in the paper was the

role of set ambiguity. How having a variety of actors in the pictures portraying different behaviors across the set of pictures allows for greater cue ambiguity leading to more descriptive stories from the participants. The addition of newer pictures additionally allowed for more set ambiguity as they seemed more relatable as compared to older black-and-white pictures. Set ambiguity doe not mean that the entire picture has to be ambiguous but more specifically the context surrounding it which would be much easier to analyze and realte to using more modern images.

Nonetheless, this research also bears limitations stemming from the nature and design of the study. The primary limitations encompass the testing location, the targeted demographic, and the scoring methodology of the PSE. Firstly, the utilization of the laboratory setting holds both strengths and weaknesses. On one hand, it provided a stable and neutral environment, free from potential distractions and external variables. However, participants did express a slight unease when traversing the underground laboratory environment, which may have inadvertently diminished their creativity during the testing process. Dul and Ceylan (2010) have found a positive correlation between work environment and work creativity, suggesting that this uneasy environment may have had an impact on the creativity of some of the stories. Creativity in particular is of importance as for the PSE, as a study done among high school student has shown that student who demonstrate strong implicit autonomous attitudes were more creative (Baum & Baumann, 2018). The cold environment may have hindered the creative abilities of some students with a high autonomy. A comment which was most received as feedback regarding the location is that feels very eerie and was said at least once every day we were present in the testing laboratory of Leiden University.

Secondly, our sample exhibited an uneven distribution of gender. Although the gender imbalance was not extreme within our sample of 91 participants, it remains that the majority

of participants were female (69%). Earlier studies have indicated that females are more likely

to seek help (Johnson, 1988; Moller-Leimkuhler, 2002), while Vogel et al. (2007) suggest that

males exhibit higher needs for autonomy and hold stronger beliefs regarding autonomy as a

valued trait. Although these gender-related viewpoints may be outdated, the unbalanced

gender distribution in our sample could have influenced the measurement of help acceptance.

This raises two possible thoughts that a) the theory shows that there was a lack in

methodology (most likely the PSE due to low interrater reliability) or that women generally

accept help more often regardless of traits. A comparison with a similar study conducted in

the previous year, which exhibited a high mean score for help acceptance ($M = 4.85$), akin to

our findings ($M = 4.91$), reveals that Pumpa and Martin (2015) achieved a mean score of 2.49

on a 7-point Likert scale when gender was balanced. This suggests the possibility of an

overestimation of help acceptance in our study. Nevertheless, even when attempting to control

for gender in the regression equation, the results remained statistically insignificant. These

findings may imply that the results reported by Pumpa and Martin (2015) apply specifically to

the health domain and may not necessarily extend to the economic domain. As discussed

above pride may have a role when dealing with financial situations. Given that shame and

pride are two very well-linked concepts (Ghorbani et al., 2012), it could be that pride and

shame are two strong underlying mechanism when dealing with financial hardship compared

to accepting help in medical situations. Especially considering that Pumpa and Martin (2015)

found that the relationship between the need for autonomy and help acceptance was fully

mediated by attitude.

Additionally, while the testing location proved conducive for recruiting student

participants, who constituted the targeted demographic, it posed challenges when attempting

to recruit external participants who would need to commute to the faculty during business

hours. Additionally, the selected target demographic did not yield optimal results as

anticipated. Most students in the Netherlands accumulate minimal debt compared to their counterparts in the United States, where university tuition costs are approximately 20 times higher per academic year. Consequently, the majority of students faced limited debt-related concerns, particularly during their initial years of studying, over half of our sample (53.8%) were 22 or younger which is typically the age associated with completing the bachelor's degree. This is of importance as young adults generally do not experience significant psychological and economic consequences from debt (Drentea, 2000). Indeed, research indicates that most students do not actively contemplate their debt while still in the study phase (Nissen, Hayward, & McManus, 2019). Consequently, the participation of individuals with debt who were not experiencing the psychological and economic consequences may have hidden how the consequences of debt affect us cognitively later on in life when approaching a company to help with debt becomes a realistic possibility.

Lastly, a substantial point of contention raised by the research collaborators pertained to the scoring of autonomy using the picture story exercise. There existed a significant lack of consensus regarding the scoring criteria, resulting in markedly low inter-rater reliability. The criteria employed for scoring the stories exhibited substantial ambiguity, leading to protracted discussions on numerous occasions regarding the classification of certain aspects within specific categories or whether they should be scored at all. Appendix D contains a scoring matrix illustrating the frequencies of different scoring combinations between two independent scorers for each image. The matrix reveals a concentration of scores along the diagonal line, indicating complete agreement in scoring. The low inter-rater reliability can be attributed to the extensive range of reasoning and scoring possibilities inherent in the methodology. It is important to note that extensive training had been conducted before testing, and while most of the training had been conducted individually some communal training sessions were still organized. Despite this training, there was still a significant lack of inter-rater reliability

which was well below the desired threshold. Such results for our interrater-reliability indicates that there is likely to be very little reliability in the measure for the need for autonomy (McHugh, 2012).

Recommendations for Future Research

A couple of theoretical suggestions for future research have arisen during this study. The first would regard the emotion of pride, as stated earlier it would be of importance to see the role of which different types of emotions play in the relationship with help acceptance when facing financial scarcity. The second theoretical recommendation regards the individuals' financial education.

One main theoretical suggestion regards the well-discussed subject of pride. It has been brought up quite frequently in this section and this subsection will delve a little deeper into why pride would be an interesting variable to examine in this context of the need for autonomy and help acceptance. Pride and shame are two very closely linked concepts that have been widely studied together (Ideland & Serder, 2023; Yagasaki, 2013). A study by Mancini and Mancini (2015) examined how guilt and shame and pride play a role in decision-making. Their results showed that proud participants valued equity and fairness, which shows that they were motivated to restore an equal monetary balance on behalf of another person. Whereby in a third-party ultimatum game the participant had to decide whether to accept or reject the offer on behalf of someone else. Proud participants often rejected unfair offers on behalf of another player as it was deemed 'not fair' for a fictional character. It would be interesting if it would also happen when it would be for themselves when facing economic scarcity compared to a third-party ultimatum game as was done in this paper. (A third-party ultimatum game is much like a regular ultimatum game but the participant is not involved in the game but rather acts on behalf of the players so the participants have nothing to gain or lose from the situation). Especially as shame and guilt have been found to be barriers to self-

acceptance (Meltzer, 2015; Fisher & Exline, 2010), further more research has also shown to be a strong positive correlation between self-acceptance and autonomy (Kalantarkousheh, 2012). Additionally, it showed that participants who exhibited guilt and shame were less likely to take action and their mindset decreased their decisional autonomy which is in line with the finding of our exploratory analyses. Including pride in further research could potentially reveal more information on how humans deal with seeking and accepting help when facing financial scarcity.

The second theoretical suggestion for future research would be to aim research to investigate the role of financial education in the model. Would someone who is financially literate ask for help as they might know it is the better option to go for, or would they try to be fully autonomous and do it on their own as they have a better understanding of finance? A paper by Kumar et al. (2023) reports that financially literate individuals report greater financial autonomy, make less impulsive decisions, and have greater financial decision-making skills. It would be interesting to examine the effects of financial literacy in this context of the need for autonomy and help acceptance as financial literacy is a relatively new term that is growing in popularity with the rise of social media (Yanto et al. 2021) and has received very little attention in academia. Financial literacy could affect help acceptance as one would be more aware of their situation and how they could proceed with their given options (Kumar et al., 2023) . Much like a well-seasoned skier may find an easier way down a mountain and in the event of encountering a situation they know they cannot face they call in for emergency help. People who are financially literate may know how to navigate personal finances better and also know when they might need expert help.

Several methodological suggestions can be proposed to optimize a replication study. Firstly, instead of merely priming participants with a debt scenario and a letter of notice, it would be crucial to recruit individuals who are actively experiencing debt and possess an in-

depth understanding of its consequences. This is of importance because having participants who have experienced debt for long enough and have had time to understand its consequences might provide a better insight into the people who may or may not be reaching out to these services. Unless a student racks up a ton of credit card debt it is rather unlikely that they will be motivated to reach out and ask for help with their student debt. Whereas an adult who is perhaps planning for some major life events is much more concerned with their economic situation and how it can be managed sustainably.

To address this concern, a feasible approach would involve organizing a dedicated testing day within an office or company setting, where a secluded and quiet room equipped with a computer could be allocated for the testing procedure. This arrangement would enable employees burdened by debt to dedicate 15 minutes of their time to participate in the study. Such an approach not only ensures that older participants gain a more profound comprehension of the ramifications associated with debt but also provides a familiar testing environment, thereby addressing the limitation of conducting assessments in an underground laboratory.

Secondly, it is imperative to enhance the scoring system. Given the increasing prevalence of artificial intelligence (AI), an intriguing option would be to leverage AI technology or algorithms by inputting examples of each scoring criterion. This would facilitate the scoring to be more consistent and coherent using the Origin Scoring System. By adopting this approach, excessive over-analysis could be mitigated, and ambiguities regarding the assessment of each criterion could be reduced. Alternatively, an AI-driven approach could be pursued to develop an entirely new scoring system. However, this alternative necessitates conducting a validation study to establish the reliability and validity of the AI-generated scoring system. Nevertheless, it holds immense potential for assessing autonomy in novel ways that may have previously been unexplored.

In conclusion, little can be drawn from the confirmatory analyses conducted as the samples indicated that the implicit need for autonomy is not a significant predictor of help acceptance. A few methodological issues had occurred but regardless the exploratory analysis indicates that shame was a significant predictor of help acceptance. This exploratory finding supports prior research and starts to illustrate the mediational role of attitudes and emotions in the model.

References

Achtziger, A. (2022). Overspending, debt, and poverty. *Current Opinion in Psychology*, *46*, 101342. https://doi.org/10.1016/j.copsyc.2022.101342

Baum, I. R., & Baumann, N. (2018). Autonomous creativity: The implicit autonomy motive fosters creative production and innovative behavior at school. *Gifted and Talented International*. https://doi.org/10.1080/15332276.2019.1608136

Baum, I. R., & Baumann, N. (2021). Arousing autonomy: A valid assessment of the implicit autonomy motive. *Personality and Individual Differences*, *168*, 110362. https://doi.org/10.1016/j.paid.2020.110362

Brownstein, M., Madva, A., & Gawronski, B. (2019). What do implicit measures measure? Wiley Interdisciplinary Reviews. *Cognitive Science, 10*(5), e1501– n/a.

de Bruijn, E. J., & Antonides, G. (2021). Poverty and economic decision making: a review of scarcity theory. *Theory and Decision*, *92*(1), 5–37. https://doi.org/10.1007/s11238-021-09802-7

Casilla-Lennon, M., Choi, S., Deal, A. M., Bensen, J. T., Narang, G., Filippou, P., McCormick, B., Pruthi, R. S., Wallen, E., Tan, H. J., Woods, M., Nielsen, M. E., & Smith, A. M. (2018). Financial Toxicity among Patients with Bladder Cancer: Reasons for Delay in Care and Effect on Quality of Life. *The Journal of Urology*, *199*(5), 1166–1173. https://doi.org/10.1016/j.juro.2017.10.049

Clay, R. A. (2011, January). *Stressed in America*. American Psychology Association. Retrieved February 10, 2023, from https://www.apa.org/monitor/2011/01/stressed-america

Clayton, M., Liñares-Zegarra, J. M., & Wilson, J. O. S. (2015). Does debt affect health? Cross country evidence on the debt-health nexus. *Social Science & Medicine*, *130*, 51–58. https://doi.org/10.1016/j.socscimed.2015.02.002

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, *78*(1), 98–104. https://doi.org/10.1037/0021-9010.78.1.98

Dayal, H., Weaver, K., & Domene, J. F. (2014). From shame to shame resilience. *Qualitative Health Research*, *25*(2), 153–167. https://doi.org/10.1177/1049732314551988

Debt In America: Statistics and Demographics. (2023, July 21). Debt.org. https://www.debt.org/faqs/americans-in-debt/demographics/

Deci, E. L., & Ryan, R. M. (1980). Self-determination Theory: When Mind Mediates Behavior. *The Journal of Mind and Behavior*, *1*(1), 33–43. http://www.jstor.org/stable/43852807

Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, *53*(6), 1024–1037. https://doi.org/10.1037/0022-3514.53.6.1024

Dimofte, C. V. (2010). Implicit measures of consumer cognition: A review. *Psychology & Marketing*, *27*(10), 921–937. https://doi.org/10.1002/mar.20366

Drentea, P. (2000). Age, debt and anxiety. *Journal of Health and Social Behavior*, *41*(4), 437. https://doi.org/10.2307/2676296

Dobbie, W., & Song, J. (2020). Targeted Debt Relief and the Origins of Financial Distress: Experimental Evidence from Distressed Credit Card Borrowers. *The American Economic Review*, *110*(4), 984–1018. https://doi.org/10.1257/aer.20171541

Dul, J., & Ceylan, C. (2010). Work environments for employee creativity. *Ergonomics*, *54*(1), 12–20. https://doi.org/10.1080/00140139.2010.542833

Elliehausen, G., Lundquist, E. C., & Staten, M. E. (2007). The impact of credit counseling on subsequent borrower behavior. *Journal of Consumer Affairs*, *41*(1), 1–28. https://doi.org/10.1111/j.1745-6606.2006.00066.x

Engel, S., & Pedersen, D. B. (2019). Microfinance as poverty-shame debt. *Emotions and Society*, *1*(2), 181–196. https://doi.org/10.1332/263168919x15653391247919

Fisher, M. L., & Exline, J. J. (2010). Moving toward Self-Forgiveness: Removing barriers related to shame, guilt, and regret. *Social and Personality Psychology Compass*, *4*(8), 548–558. https://doi.org/10.1111/j.1751-9004.2010.00276.x

Gabler, N. (2016). The secret shame of middle-class Americans. *The Atlantic*, *317*.

Ghorbani, M., Liao, Y., Caykoylu, S., & Chand, M. (2012). Guilt, shame, and reparative behavior: the effect of Psychological proximity. *Journal of Business Ethics*, *114*(2), 311–323. https://doi.org/10.1007/s10551-012-1350-2

Gruber, N., & Kreuzpointner, L. (2013). Measuring the Reliability of Picture Story Exercises like the TAT. *PLOS ONE*, *8*(11), e79450. https://doi.org/10.1371/journal.pone.0079450

Hanson, M. (2023a, January 1). *College Enrollment & Student Demographic Statistics*. Education Data Initiative. https://educationdata.org/college-enrollment-statistics

Hanson, M. (2023b, January 1). *Student Loan Debt Statistics*. Education Data Initiative. https://educationdata.org/student-loan-debt-statistics

Hilbert, L. P., Noordewier, M. K., & Van Dijk, W. W. (2022, Early Access). Financial scarcity increases discounting of gains and losses: Experimental evidence from a household task. Journal of Economic Psychology, 92: 102546. https://doi.org/10.1016/j.joep.2022.102546

Huijsmans, I., Ma, I., Micheli, L., Civai, C., Stallen, M., Sanfey, A.G., 2019. A scarcity

mindset alters neural processing underlying consumer decision making. *Proceedings*

of the National Academy of Sciences, 116 (24), 11699–11704.

https://doi.org/10.1073/pnas.1818572116

Ideland, M., & Serder, M. (2023). Joy, pride, and shame: on working in the affective economy

of edu-business. *British Journal of Sociology of Education*, *44*(5), 860–878.

https://doi.org/10.1080/01425692.2023.2203846

Interest - DUO. (n.d.). duo.nl. https://duo.nl/particulier/interest.jsp

International Monetary Fund. (2022). *Household debt, loans and debt securities*. Retrieved

February 3, 2023, from

https://www.imf.org/external/datamapper/HH_LS@GDD/SWE/AUS/CAN/DEU/USA

/GBR?year=2021

Kalantarkousheh, S. M. (2012, July 31). *Gender as a moderator in the Association of Self-*

Acceptance and Autonomy of Iranian University Students.

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2304368

Kumar, P., Pillai, R., Kumar, N., & Tabash, M. I. (2023). The interplay of skills, digital

financial literacy, capability, and autonomy in financial decision making and well-

being. *Borsa Istanbul Review*, *23*(1), 169–183.

https://doi.org/10.1016/j.bir.2022.09.012

Landers, M., & Sznycer, D. (2022). The evolution of shame and its display. *Evolutionary*

Human Sciences, 4, E45. doi:10.1017/ehs.2022.43

Lea, S. E. G., & Webley, P. (1997). Pride in economic psychology. *Journal of Economic*

Psychology, *18*(2–3), 323–340. https://doi.org/10.1016/s0167-4870(97)00011-1

Lever, J. P. (2008). Poverty, Stressful Life Events, and Coping Strategies. *Spanish Journal of*

Psychology, *11*(1), 228–249. https://doi.org/10.1017/s1138741600004273

Loewenstein, G., & Thaler, R. H. (1989). Anomalies - Intertemporal choice. The Journal of

Economic Perspectives, 3(4), 181-193.

Mancini, A., & Mancini, F. (2015). Do not play God: contrasting effects of deontological

guilt and pride on decision-making. *Frontiers in Psychology*, *6*.

https://doi.org/10.3389/fpsyg.2015.01251

Martela, F., & Ryan, R. M. (2016). The Benefits of Benevolence: Basic Psychological

Needs, Beneficence, and the Enhancement of Well-Being. Journal of Personality,

84(6), 750–764. https://doi.org/10.1111/jopy.12215

McClelland, D. C. (1980). Motive dispositions: The merits of operant and respondent

measures. *Review of personality and social psychology*, *1*, 10-41.

McHugh, M. L. (2012, October 1). *Interrater reliability: the kappa statistic*. PubMed Central

(PMC).

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3900052/#:~:text=The%20importanc

e%20of%20rater%20reliability,variable%20is%20called%20interrater%20reliability.

Meltzer, M. (2015). The use of acceptance to promote positive change by decreasing shame

and guilt: a practice exemplar. *Issues in Mental Health Nursing*.

https://doi.org/10.3109/01612840.2015.1043673

Mishra, P., Pandey, C. K., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive

statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, *22*(1),

67. https://doi.org/10.4103/aca.aca_157_18

Nissen, S., Hayward, B., Mcmanus, R., 2019. Student debt and wellbeing: a research agenda. Kōtuitui: New Zealand Journal of Social Sciences Online 14, 245–256.. https://doi.org/10.1080/1177083x.2019.1614635

Nguyen, T., Levkoff, S., Nguyen, H., 2022. 'He is just getting old, you know': the role of cultural and health beliefs in shaping the help-seeking process of family members caring for persons with dementia in Vietnam. Ethnicity & Health 27, 1630–1651.. https://doi.org/10.1080/13557858.2021.1922612

Oudshoorn, R. (2022). *The moderating effect of shame resilience on the relationship between the need for autonomy and the willingness to accept help when facing financial scarcity.* [Unpublished thesis]. Leiden University.

Pinquart, M., & Sörensen, S. (2000). Influences of socioeconomic status, social network, and competence on subjective well-being in later life: A meta-analysis. *Psychology and Aging*, *15*(2), 187–224. https://doi.org/10.1037/0882-7974.15.2.187

Pumpa, M., Martin, G., 2015. The impact of attitudes as a mediator between sense of autonomy and help-seeking intentions for self-injury. Child and Adolescent Psychiatry and Mental Health 9.. https://doi.org/10.1186/s13034-015-0058-3

Ramsay, J. E., & Pang, J. S. (2013). Set ambiguity: A key determinant of reliability and validity in the picture story exercise. *Motivation and Emotion*, *37*(4), 661–674. https://doi.org/10.1007/s11031-012-9339-9

Ryan, R. M., & Deci, E. L. (2006). Self-Regulation and the Problem of Human Autonomy: Does Psychology Need Choice, Self-Determination, and Will? *Journal of Personality*, *74*(6), 1557–1586. https://doi.org/10.1111/j.1467-6494.2006.00420.x

Sapolsky, R. M. (2004). *Why Zebras Don't Get Ulcers: The Acclaimed Guide to Stress, Stress-Related Diseases, and Coping (Third Edition)*. Holt Paperbacks.

Sawang, S., O'Connor, P. J., Kivits, R. A., & Jones, P. (2020). Business Owner-Managers'

Job Autonomy and Job Satisfaction: Up, Down or No Change? *Frontiers in*

Psychology, *11*. https://doi.org/10.3389/fpsyg.2020.01506

Schäpers, P., Krumm, S., Lievens, F., & Stenzel, N. (2021). Arousing Motives or Eliciting

Stories? On the Role of Pictures in a Picture–Story Exercise. *Assessment*,

107319112110361. https://doi.org/10.1177/10731911211036191

Schönbrodt, F. D., Hagemeyer, B., Brandstätter, V., Czikmantori, T., Gröpel, P., Hennecke,

M., Israel, L. S. F., Janson, K. T., Kemper, N., Köllner, M. G., Kopp, P. M., Mojzisch,

A., Müller-Hotop, R., Prüfer, J., Quirin, M., Scheidemann, B., Schiestel, L., Schulz-

Hardt, S., Sust, L. N. N., . . . Schultheiss, O. C. (2020). Measuring Implicit Motives

with the Picture Story Exercise (PSE): Databases of Expert-Coded German Stories,

Pictures, and Updated Picture Norms. *Journal of Personality Assessment*, *103*(3),

392–405. https://doi.org/10.1080/00223891.2020.1726936

Schultheiss, O. C., Liening, S. H., & Schad, D. (2008). The reliability of a Picture Story

Exercise measure of implicit motives: Estimates of internal consistency, retest

reliability, and ipsative stability. Journal of Research in Personality, 42(6), 1560–

1571. https://doi.org/10.1016/j.jrp.2008.07.008

Schultheiss, O. C., & Pang, J. S. (2007). Measuring implicit motives. In R.W. Robins, R.

C. Fraley, & R. Krueger (Eds.), Handbook

Steenkamp, J., De Jong, M., & Baumgartner, H. (2010). Socially desirable response

tendencies in survey research. *Journal of Marketing Research*, *47*(2), 199–214.

https://doi.org/10.1509/jmkr.47.2.199

Sweet, E., Nandi, A., Adam, E. K. & McDade, T. W. (2013). The high price of debt:

Household financial debt and its impact on mental and physical health. *Social Science & Medicine*, *91*, 94–100. https://doi.org/10.1016/j.socscimed.2013.05.009

Underlid, K. (2012). Autonomy and Poverty – An Empirical Study of Long-Term Recipients of Social Assistance. IntechOpen. https://doi.org/10.5772/37833

Using the Global Assessment of Functioning Scale to demonstrate the importance of inter-rater reliability. (2010, January 1). *https://www.apa.org*. https://www.apa.org/ed/precollege/undergrad/ptacc/inter-rater-reliability#:~:text=What%20are%20the%20implications%20of,have%20seen%20psychotherapy%20as%20unnecessary.

Wilson, C. J., & Deane, F. P. (2010). Brief report: Need for autonomy and other perceived barriers relating to adolescents' intentions to seek professional mental health care. *Journal of Adolescence*, *35*(1), 233–237. https://doi.org/10.1016/j.adolescence.2010.06.011

Wiltshire, J., Elder, K., Kiefe, C. I., & Allison, J. J. (2016). Medical debt and related financial consequences among older African American and white adults. *American Journal of Public Health*, *106*(6), 1086–1091. https://doi.org/10.2105/ajph.2016.303137

Yagasaki, M. (2013). Pride and Shame. *University of Tokyo*.

Yanto, H., Ismail, N., Kiswanto, K., Rahim, N. M., & Baroroh, N. (2021). The roles of peers and social media in building financial literacy among the millennial generation: A case of indonesian economics and business students. *Cogent Social Sciences*, *7*(1). https://doi.org/10.1080/23311886.2021.1947579

Appendix A

Pictures from the Picture Story Exercise

Appendix B

Debt scenario

Last January you moved into your new apartment which was not furnished. You had to dip into most of your personal savings to furnish your apartment. You had a lot of big purchases to make like a fridge, a desk, and chairs. You had just enough left to pay your rent. Having nothing left, you had to survive on instant ramen and pasta for a couple weeks. However, you had forgotten that municipal taxes are due this time of the year and you had spent all your savings on your new apartment. Living alone with no one to help out with taxes and the increasingly expensive electric bills, you were stuck in a situation where you had to choose to either pay your taxes or your electrical bill.

Appendix C

Debt Letter

Date   : March 7th, 2023

E-mail no.   : 101019-ado

Subject   : rental debt; Last warning

Dear Sir/Madam,

According to our administration, there is an outstanding amount in your account. At this time, the total amount of the arrears is three times your monthly rent.

What can you do?

Make sure that the sufficient amount of debt, including this month's rent, is credited to our bank account before March 28th, 2023.

What if you do not do anything?

If you do not do anything, we will hand over the arrears to our bailiff. Your debt will then be increased with the additional bailiff costs. These costs are at least 20% of the total arrears.

To conclude

I hope that you notice the severity of the situation. Do you feel like you need help repaying us? Please, contact our housing consultant. You can reach us on 0800 348 184 or by email: help@housingcorporation.org.

Yours sincerely,

C.P. Green

Housing consultant

Appendix D

Appendix D Scoring Matrix

Table 1

Scoring frequency matric for the first picture (Diagonal bold numbers indicate agreeance between scorers)

	0	**1**	**2**	**3**	**4**	**5**	**6**
0	**3**	5	3	-	-	-	-
1	5	**3**	2	-	1	-	-
2	4	6	**13**	3	1	-	**-**
3	4	4	10	**6**	-	-	-
4	1	3	5	5	**1**	-	-
5	-	-	2	-	-	-	-
6	-	-	0	-	1	-	-

Table 2

Scoring frequency matric for the second picture (Diagonal bold numbers indicate agreeance between scorers)

	0	**1**	**2**	**3**	**4**	**5**	**6**
0	**3**	3	-	-	-	-	-
1	3	**18**	1	-	1	-	-
2	1	9	**12**	2	-	-	-
3	-	1	14	**3**	-	-	-
4	-	2	5	4	**2**	-	-
5	-	-	1	1	2	-	-
6	-	-	-	-	1	-	-

Table 3

Scoring frequency matric for the third picture (Diagonal bold numbers indicate agreeance between scorers)

	0	**1**	**2**	**3**	**4**	**5**	**6**
0	-	-	-	-	-	-	-
1	3	**10**	6	5	-	-	-
2	4	2	**9**	9	3	-	-
3	-	2	11	**4**	3	1	-
4	-	-	1	10	**3**	2	-
5	-	-	-	2	-	-	-
6	-	-	-	-	-	-	-

Table 4

Scoring frequency matric for the fourth picture (Diagonal bold numbers indicate agreeance between scorers)

	0	**1**	**2**	**3**	**4**	**5**	**6**
0	**4**	5	2	-	-	-	-
1	6	**8**	9	5	-	-	-
2	10	7	**9**	6	1	-	-
3	1	2	5	**6**	-	-	-
4	-	-	1	-	-	-	-
5	-	-	-	-	-	**1**	-
6	-	-	-	-	-	-	-

Appendix F

Full questionnaire

Welcome to our study on financial decision making!

What is the study about?

In this study, we examine how people make decisions when they are in financial difficulty. If you choose to participate, you will be asked till in a questionnaire. You will be asked to write short stories, recall/imagine a situation of financial difficulty, read a letter, and answer several questions. We cannot tell you the exact research question of the study now, since it may influence the results. After participation, we will debrief you about the full nature and aim of this study.

Participation will take about 25 minutes. As compensation for participation you are offered €3.75. Psychology Bachelor students can also choose to receive 1 participant credit instead. In case of non-completion, there will be no compensation.

If you want to participate, we need your consent

Before taking part in this study, please read this full information letter and fill in the consent form if you understand the statements and freely consent to participate in the study. Participation is only possible if you have provided informed consent. You can withdraw your consent for this study at any given time without any negative consequences.

What happens with your responses?

The survey includes several personal questions (about age, gender, education level, and income), so that we can describe some basic characteristics of our research sample. You are not obliged to answer personal questions. We will save the data on a secured University server for 10 years (in line with the Netherlands Code of Conduct for Research Integrity), and may also be used to answer future research questions. We guarantee that all responses will be treated confidentially, saved in a coded way, and in no case will responses from individual

participants be identified. The study has been approved by the Psychology Ethics Committee.

Questions or complaints?

Do you have questions about this study or your rights? Or do you wish to lodge a complaint

or concern? Then you can contact the principal researcher, Dr. Anouk van der Weiden:

a.van.der.weiden@fsw.leidenuniv.nl. In case you have specific questions regarding your

privacy, you can contact our privacy officer at Leiden University via

privacy@fsw.leidenuniv.nl.

Thank you in advance for your participation!

Kind regards,

Anouk van der Weiden, principal investigator

Department of Social, Economic, and Organisational Psychology, Leiden University

a.van.der.weiden@fsw.leidenuniv.nl

☐   I choose not to participate in this study

As you do not wish to consent, we kindly ask you to return your submission on Prolific

by selecting the 'Stop without completing' button, and thus making space for other

participants to take part in the survey.

Thank you!

I choose to participate in this study and declare that I:

☐   Understand the information about the study entitled 'Financial decision

making' as described in the information above, and have had the opportunity to ask

questions about the study (via email);

☐   Understand that the data will be collected and processed in a coded way

☐   Understand that I can withdraw from participation at all times, without needing to provide reasons, and how I will be compensated in case I do not complete the study

☐   Consent to participate in this study

We will start the study with a quick audio and colour test.

Before we continue please:

1. Put on the headphones.

2. Play the fragment below.

3. Confirm that you can hear the audio fragment.

☐   I hear audio

☐   I do not hear audio

If *Before we continue please: 1 Put on the headphones. 2. Play the fragments below. 3. Confirm that you can heard the audio fragment.   I do not hear audio* is selected

Please notify the experiment leader that the audio is not working.

We now continue with a quick colour test.

The colour test is simple. When asked for your favorite colour, you must enter the word 'puce' in the text box.

Based on the text you read on the previous page, what is your favorite colour?

> If *Based on the text you read on the previous page, what is your favorite colour?* Text Response Is equal to "puce"
>
> That is correct. We will now continue with the study.
>
> If *Based on the text you read on the previous page, what is your favorite colour?* Text Response Is not equal to "puce"
>
> That is incorrect. Please, pay attention to the instructions. It's important for the reliability of our research and the conclusions that we can draw from this that you seriously participate in this study.

We will now continue with the study.

We will start with the Picture Story Exercise. In this exercise, your task is to write a complete story about each of a series of 4 pictures - an imaginative story with a beginning, a middle, and an end.

Try to portray who the people in each picture are, what they are feeling, thinking, and wishing for. Try to tell what led to the situation depicted in each picture and how everything will turn out in the end.

With each picture, we will provide some guiding questions – these should be used only as guides to writing your story. You do NOT need to answer them specifically.

Each picture will be presented for 15 seconds. After it has disappeared, write whatever story comes to your mind. Don't worry about grammar, spelling, or punctuation — they are of no concern here.

You will have 3 minutes for each story. A timer will inform you of how much time there is left to finish your story. Once the 3 minutes are over, you will have 30s left to quickly finish your last sentence. This will also be announced over the headphones. If you take less than 3 minutes, the computer will be ready to move on after 2.5 minutes.

Please keep the headphones on.

The task will start on the next page.

PSE1 Answer

Guiding questions: What is happening? Who are the people? What happened before? What are the people thinking about and feeling? What do they want? What will happen next?

PSE2 Answer

Guiding questions: What is happening? Who are the people? What happened before? What are the people thinking about and feeling? What do they want? What will happen next?

PSE3 Answer

Guiding questions: What is happening? Who are the people? What happened before? What are the people thinking about and feeling? What do they want? What will happen next?

PSE4 Answer

Guiding questions: What is happening? Who are the people? What happened before? What are the people thinking about and feeling? What do they want? What will happen next?

```

```

You have completed the Picture Story Exercise and you can take off the headphones. We will now continue with several questions on financial decision making.

Are you currently experiencing financial difficulties? Or can you vividly remember a personal situation in which you have experienced financial difficulties because you had less money than you needed?
(*e.g., debts or loans they could not pay back, difficulty paying bills or earning too little money to make ends meet*)

- [ ] I am currently experiencing debt

- [ ] I can vividly remember having experienced debt

- [ ] No, I have never experienced financial debt

- [ ] I prefer not to answer

If *Are you currently experiencing financial difficulties? Or can you vividly remember a personal situation in which you have experienced financial difficulties because you had less money than you needed*? I can vividly remember having experienced debt Is Selected

Or *Are you currently experiencing financial difficulties? Or can you vividly remember a personal situation in which you have experienced financial difficulties because you had less money than you needed*? I am currently experiencing debt Is Selected

---

We would like to ask you to think of such a personal situation in which you experience (or have experienced) financial difficulties. In other words, a situation where you have (had) less money than you need. For example, when you have debts or loans that you cannot pay back. Or when you have trouble paying your bills or earn too little money to make ends meet.

Please describe the situation below in a few sentences in such a way that someone reading it knows what you are thinking and feeling in this situation.

If *Are you currently experiencing financial difficulties? Or can you vividly remember a personal situation in which you have experienced financial difficulties because you had less money than you needed*? *No, I have never experienced financial debt*

Is Selected

Or *Are you currently experiencing financial difficulties? Or can you vividly remember a personal situation in which you have experienced financial difficulties because you had less money than you needed? I prefer not to answer* Is Selected

We would like to ask you to please read the following section. As you read the following scenario try to vividly imagine yourself as if you were in this situation: Last January you moved into your new apartment which was not furnished. You had to dip into most of your personal savings to furnish your apartment. You had a lot of big purchases to make like a fridge, a desk, and chairs. You had just enough left to pay your rent. Having nothing left, you had to survive on instant ramen and pasta for a couple weeks. However, you had forgotten that municipal taxes are due this time of the year and you had spent all your savings on your new apartment. Living alone with no one to help out with taxes and the increasingly expensive electric bills, you were stuck in a situation where you had to choose to either pay your taxes or your electrical bill.

Imagine that in the situation as just described, you are renting a place and you haven't paid your rent for two months. Last month, you received a first email from the housing corporation with a request to pay the owed amount. You did not respond to it and did not make a payment.

Please, take a moment to really imagine yourself in this situation. We would like you to engage in this situation as much as possible. The more you feel like you can imagine this situation the better.

Now, the housing corporation has sent you a second email about your outstanding debt.

Please, continue to read the email. Afterwards, we ask you to answer a couple of questions.

Date   : March 7th, 2023

E-mail no.   : 101019-ado

Subject   : rental debt; Last warning

Dear Sir/Madam,

According to our administration, there is an outstanding amount in your account. At this time, the total amount of the arrears is three times your monthly rent.

What can you do?

Make sure that the sufficient amount of debt, including this month's rent, is credited to our bank account before March 28th, 2023.

What if you do not do anything?

If you do not do anything, we will hand over the arrears to our bailiff. Your debt will then be increased with the additional bailiff costs. These costs are at least 20% of the total arrears.

To conclude

I hope that you notice the severity of the situation. Do you feel like you need help repaying us? Please, contact our housing consultant. You can reach us on 0800 348 184 or by email: help@housingcorporation.org.

Yours sincerely,

C.P. Green

Housing consultant

Q47

In a moment, you will be asked to answer some questions about how you feel, think, and act now you have received this debt validation email from the housing corporation.

Please, be aware that there are no right or wrong answers: we are interested in your personal thoughts, feelings, and actions.

Please, go to the next page to continue.

We are interested in your willingness to reach out to the company for help.

Please indicate how likely you are to perform the following actions.

If you were in the situation as described in the letter above, how likely are you to...

	Extremely unlikely	Moderately unlikely	Slightly unlikely	Neither likely nor unlikely	Slightly likely	Moderately likely	Extremely likely
Answer the phone when the company tries to contact you?	○	○	○	○	○	○	○
Contact the company by phone or by e-mail?	○	○	○	○	○	○	○
Reach out to the company to consult on what steps to take?	○	○	○	○	○	○	○
Feel negative about reaching out for help?	○	○	○	○	○	○	○

	1 (strongly disagree)	2	3	4	5	6	7 (strongly agree)
I feel that others look down on me because of my financial situation	○	○	○	○	○	○	○
I feel as if I have failed as a person.	○	○	○	○	○	○	○
I feel inadequate	○	○	○	○	○	○	○
I feel like an unworthy or invaluable person	○	○	○	○	○	○	○

Almost done!

Below are two final demographic questions

What is your gender?

☐ Male

☐ Female

☐ Non-binary / third gender

_____

___

What is your age?

_____

___

What is your estimated annual income in Euros

Please, can you provide an estimation of the amount of debt (in Euros) you are currently

facing?

(If you have no idea, please write down: no idea.)

Dear participant,

As we have indicated in the information letter before, we will now debrief you about the true nature and aim of the study.

Some background

Buying enough food for a week or finally making that well-needed dentist appointment? Paying the electric bill or getting enough fuel to get to work? Most of us never even have to think about such things. But some people face tough choices like this on a day-to-day basis. Even in high-income countries, some people struggle to make ends meet. Recent statistics, for example, show that about one million Dutch households have problematic debts. Although people in a negative financial situation are offered help by different institutions, the help offered is not always accepted.

The questions we want to answer

In this study, we want to know whether the need to make your own decisions (autonomy) may lower the willingness to accept help from others (e.g., in the form of debt advice). The need for autonomy was measured in the task where you had to write stories about four different pictures. We will score your stories on how autonomously the characters in your stories were behaving. People with a higher need for autonomy are more likely to write stories about autonomous characters.

We also know that people sometimes feel ashamed of their financial difficulties, which may cause them to avoid the situation, including contact with help providers. We therefore also want to test whether people who are experiencing more shame are less likely to accept help.

You can decide that your data may not be used for (some of) these aims. In that case, please contact us and provide the following unique participant code: **${e://Field/RandomID}**. We

will then exclude your survey responses from our analyses.

Please save your personal code for future reference.

Any questions for us?

If you have any questions regarding this study, please contact Dr. Anouk van der Weiden,

a.van.der.weiden@fsw.leidenuniv.nl. In case you have specific questions regarding your

privacy, you can contact our privacy officer at Leiden University via

privacy@fsw.leidenuniv.nl.

In case you want to inspect your own data, you will have to provide your participant code. We

are not able to retrieve your personal data without this code.

We hope you enjoyed our study. Your contribution to our study is greatly appreciated.

Thank you again for your co-operation!

Dr. Anouk van der Weiden,

Principal Investigator "Financial decision making"

Department of Social, Economic, and Organizational Psychology

We thank you for the time you have spent taking this survey

Your answer has been recorded