

How friends and colleagues influence your perception of wealth inequality

Nynke Trijntje de Vries (t.de.vries.37@student.rug.nl)

S5184339

Bachelor thesis

Sociology

Faculty of Behavioural and Social Sciences (RUG)

Daniel Redhead

19th of May 2025

Amount of words: 12746

Abstract

Perceptions of wealth inequality are not solely determined by objective economic indicators, but are deeply shaped by individuals' social environments and psychological predispositions. This study investigates the extent to which an individual's current social circumstances influence their perception of wealth inequality in the Netherlands. Drawing on theories of reference group comparison and system justification, the research explores three key factors: the educational homogeneity of one's social and professional networks, exposure to people from diverse socioeconomic backgrounds, and self-placement on the social ladder.

Data were obtained from the Longitudinal Internet Studies for the Social Sciences (LISS) panel, a nationally representative dataset, comprising 1,605 respondents. Through a series of logistic and linear regression analyses, the study examined whether and how these variables predict individuals' views on wealth inequality. While the degree of educational homogeneity in friendships and workplaces was hypothesized to affect inequality perception, the findings indicate that this factor is not a significant predictor. Instead, the results show that individuals who report greater exposure to both poorer and wealthier people are significantly more likely to perceive wealth inequality as a serious issue. Additionally, those who place themselves lower on the social ladder also tend to report stronger perceptions of inequality, consistent with system justification theory.

These findings suggest that subjective experiences—especially social exposure and perceived social status—play a more substantial role in shaping how people understand economic disparities than the structural composition of their social networks alone. The study contributes to broader sociological debates on the social construction of inequality and highlights the importance of addressing experiential and psychological factors when developing public policy and inequality awareness campaigns.

Content

Abstract	2
Introduction	6
Research design	7
Research model	7
Theoretical framework	8
The role of social networks in constructing perceptions of inequality	8
The importance of education in social homogeneity	9
The role in workplace culture in shaping perceptions of inequality	10
Exposure to different economic groups and awareness of inequality	12
An individual's perceived social and economic position influences their perceptions of inequality	13
The role of system justification in individuals' perceived inequality based on social ladder placement	14
Summary and research approach	15
Methodological elaboration	16
Research population and sample	16
Research design	17
Reliability and validity of the research as a whole	17
Operationalisation	18
Friendship educational homogeneity (IV1) – ordinal	18
Workplace educational homogeneity (IV2) – ordinal	19
Exposure to inequality (V1) – ordinal	20
Social ladder placement (V2) – ordinal	23
Wealth inequality perception (DV) – ordinal	24
Experimental condition	25
Analysis design	26
Results	28
Descriptive statistics	28

Model evaluation.....	30
Hypothesis testing	31
Mediation	34
Probabilities of perceiving wealth inequality based on exposure to inequality, experimental conditions, and social ladder placement.....	37
Conclusion and discussion.....	39
Conclusion	39
Concluding remarks	41
Discussion.....	41
Limitations of the dataset	41
Methodological considerations.....	42
Literature references	44
Attachment 1	46
Description original variables	46
Friendship educational homogeneity (IV1)	46
Workplace educational homogeneity (IV2).....	48
Exposure to inequality (V1).....	49
Social ladder placement (V2)	57
Wealth inequality perception (DV).....	58
Edits of variables.....	60
Final variables.....	66
Friendship educational homogeneity (IV1) – ordinal	67
Workplace educational homogeneity (IV2) – ordinal.....	69
Exposure to inequality (V1) – ordinal.....	70
Social ladder placement (V2) – ordinal	79
Wealth inequality perception (DV) – ordinal.....	80
Experimental conditions	81
Attachment 2 – Analysis	84

Correlations	84
Logistic regression	85
Linear regression	89
Probabilities Exposure to inequality and Social ladder placement	94
Attachment 3 – Assumptions logistic regression.....	96
Syntax and output	96
-2 Log Likelihood (–2LL) and chi-square test	101
Hosmer-Lemeshow test.....	101
Multicollinearities (linear): VIF	102
Leverage	102
DFBeta	102

Introduction

Wealth inequality has been one of the most debated social trends of the past decades. Some individuals hardly notice the distinction between poor and wealthy, whereas for others it is a serious problem that threatens not just economic stability but also social harmony. Yet, how people view wealth, and disparities in wealth is not a question of hard facts—it is strongly dependent on their surroundings and social environment.

Sociologists and social psychologists have increasingly studied how the social world shape our economic perceptions. People compare their economic position to those who surround them—friends, coworkers, and family members. This psychological bias, known as reference group comparison, leads us to perceive inequality in a distorted manner. Research shows that people who mostly socialize with people of the same socioeconomic status are less aware of the broader picture of inequality (Hauser & Norton, 2017; Knell & Stix, 2020). However, people who have more diverse social groups are more aware of economic disparities.

Another factor that determines how we view inequality is system justification theory. This theory asserts that people will tend to rationalize and justify the existing economic system even if it is unequal or not in their favour (Jost, 2019). Most people believe that the system is broadly fair and so tend to understate the extent of wealth inequality. Those who are privileged may view their success as solely the product of hard work and ability, and those who have less may also rationalize inequality as part of the way society naturally operates. This tendency to legitimize and accept the status quo is an important factor in influencing our understanding of economic inequality.

This study examines how economic and social factors influence individuals' perceptions of wealth disparities. It is concerned with how the make-up of our social and work lives affects our perceptions of economic disparities. The central research inquiry is: How does an individual's current social and economic situation impact their perception of wealth inequality?

To address this, the study focuses on three key aspects:

1. The degree of homogeneity in friendships and work environments based on educational background (IV1, IV2),
2. The influence of exposure to both wealthier and poorer individuals (V1),
3. The role of self-placement on the social ladder (V2).

This research borrows, among other literature, from reference group comparison and system justification theory to help explain how these elements affect our perceptions.

By not merely looking at *what* people think about inequality but *why* they think this way, this research adds to the current discussion of economic differences. Wealth inequality is a motivating force in political and social conflicts around the world. In the Netherlands, the Party for Freedom (PVV) has leveraged growing wealth disparities to fuel populist rhetoric, often attributing social unrest to economic inequality. Similarly, in the United States, Senator Bernie Sanders has drawn large crowds during his "Fighting Oligarchy" tour, emphasizing concerns about oligarchy and authoritarianism under President Trump's administration (Lutz, 2025). How perceptions are created about it is of great importance. Results of this research could be used perhaps to inform policy and public campaigns towards increased understanding of economic inequality

Research design

Research model

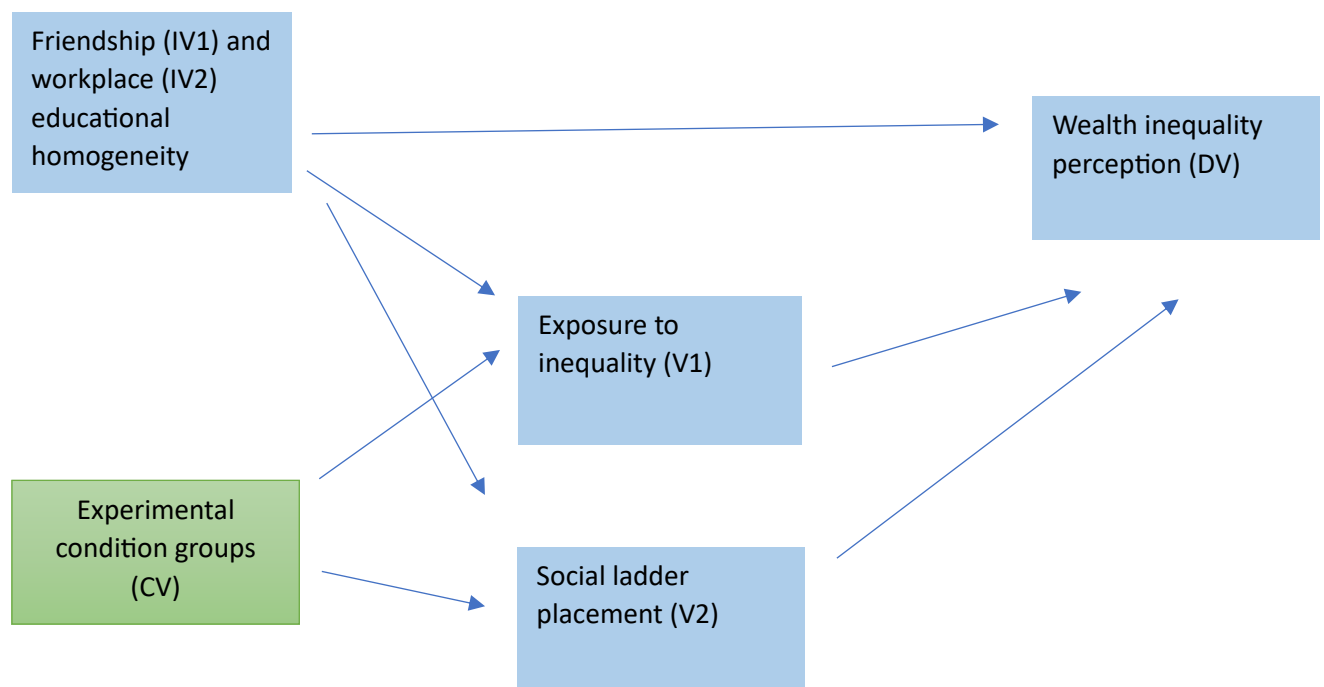


Figure 1: Conceptual model on the perception of wealth inequality.

Theoretical framework

Wealth inequality is a major issue worldwide, but people see it differently depending on their social environment and economic background. Research shows that people compare their financial situation to those around them, such as friends and coworkers, which affects how they view inequality (Hauser & Norton, 2017). If someone mostly interacts with people of a similar education level or income, they may not fully recognize how much inequality exists. In contrast, those with more diverse social circles are more likely to see economic disparities clearly (Knell & Stix, 2020). Another factor is system justification theory, which suggests that people often believe the economic system is fair, even when it is unequal (Jost, 2019). This study explores how the diversity of social networks, exposure to different economic groups, and self-placement on the social ladder shape perceptions of wealth inequality. The expectation is that people with more varied social connections will have a better understanding of inequality, while those surrounded by similar peers may underestimate economic disparities.

We will look at social and economic factors that have an impact on the perception of wealth inequality. First, the homogeneity of an individual's social circle—specifically, friends and colleagues in relation to educational background—plays a role in shaping their perception of wealth inequality. This can be explained by examining the extent to which an individual interacts with both wealthy and poor individuals. Additionally, a person's perceived position on the social ladder influences their perception of wealth inequality. Socioeconomic status (SES) shapes how people see economic disparity—those higher on the ladder may minimize it, while those lower down experience it more acutely (Douenne, Sund, & Van Der Weele, 2024; Hauser & Norton, 2017). To test this theory, several hypotheses have been formulated.

The role of social networks in constructing perceptions of inequality

Firstly, the higher the number of friends and coworkers an individual has who have the same educational status as the respondent, the lesser they will regard economic inequality as being high. People assess their economic situation based on the group they use as a reference for comparison. When individuals spend time with others who have accomplished the same education level, it creates a similar culture in the office and social environment (Ingram, 2021). This leads to a rather limited social comparison frame. According to research by Knell and Stix (2020), individuals perceive income and wealth inequality in relation to their personal reference groups rather than objective standards. Their perceptions of inequality are shaped by their own social context rather than broader economic conditions. This explains why some people living in highly unequal societies fail to recognize extreme

disparities—they are comparing themselves to others in similar financial circumstances rather than to the broader population. Similarly, Hauser and Norton (2017) explain how people also tend to downplay actual inequality levels due to their reliance on cues from the immediate environment of an individual, in support of the fact that homogeneity of one's group influences perceptions of inequality.

In addition, people base their own wealth and position in relation to the others within one's circle. If individuals have wealthier friends, they might feel relatively poorer and experience inequality more profoundly (Kakwani, 1984). This can result in wealth blindness; wealthy individuals are likely to underestimate inequality because they mostly exist among other wealthy individuals and are less directly confronted with inequality (Gimpelson & Treisman, 2018). Gimpelson & Treisman's (2018) study also indicates that people are likely to misestimate inequality levels and their place in the income hierarchy, and this affects political and economic attitudes. As a result, differences in wealth inequality may also be underestimated. Similarly, Knell & Stix (2020) demonstrated that individuals' views on inequality are more closely related to their immediate social reference groups than to broader economic indicators. This explains why some people living in highly unequal societies fail to recognize extreme disparities—they are comparing themselves to others in similar financial circumstances rather than to the broader population.

The importance of education in social homogeneity

One of the key determinants of social homogeneity is education. People tend to form friendships and professional relationships with individuals who have similar educational backgrounds, which can reinforce economic echo chambers. Educational attainment strongly correlates with income levels, job opportunities, and access to social capital, making it a crucial factor in shaping perceptions of inequality (Ingram, 2021). The typically high levels of homogeneity within the workplace and social environment creates a lower level of perceived wealth inequality. Bowles and Carlin (2020) suggest that perceived inequality is better understood through social networks, rather than economic metrics, such as the Gini coefficient, which measures income distribution on a numerical scale. Social networks refer to the relationships and connections individuals have, which shape their understanding of inequality by influencing whom they compare themselves to. This means that people's perceptions of inequality are often based on their immediate social circles. Unlike economic metrics, which assume full awareness of wealth distribution, individuals primarily assess inequality through social comparison within their networks (Jackson, Rogers, & Zenou, 2017). This often leads to misperceptions, as people's exposure to wealth inequality is limited to those of similar socioeconomic status (Gimpelson & Treisman, 2018).

Individuals are influenced by anchors. An anchor serves as a reference point in decision making. Anchoring is when individuals rely on the information that they receive or information that they think of most easily when making judgments. When individuals have limited contact with individuals from other socioeconomic groups, they are less likely to be exposed to wealth differences. Du and King (2022) assume that system justification is a major driver of economic attitudes as those who justify the status quo will be less likely to observe disparities—particularly if their social networks are not heterogeneous. Moreover, system justification theory explains this effect by positing that individuals have a psychological tendency to justify the existing social order (Jost, 2019). An example of this can be seen in Hauser and Norton's (2017) study, which found that Americans systematically underestimate the extent of wealth inequality, often believing that wealth is more evenly distributed than it actually is. Hauser & Norton (2017) found that individuals who primarily interact with people of similar educational backgrounds are more likely to underestimate wealth inequality. This is because higher education often provides access to well-paying jobs and financial stability, leading those with similar educational credentials to perceive economic disparities as less extreme than they actually are. Conversely, individuals from diverse educational backgrounds are more likely to encounter different economic realities, leading to greater awareness of inequality (Knell & Stix, 2020).

People who possess system-justifying beliefs are likely to perceive the economic system as legitimate and justified, even when faced with inequality. The tendency is strongest when people feel that economic and social orders are necessary or inevitable (Costa-Lopes, Dovidio, Pereira, & Jost, 2013). Therefore, those who internalize system-justifying beliefs are more likely to accept and legitimize wealth inequalities and not question them (García-Sánchez et al., 2019; Willis et al., 2015). García-Sánchez et al. (2019) found that in highly unequal countries, people who strongly believe in justifying the current system are less likely to support policies that reduce wealth inequality. Similarly, Willis et al. (2015) showed that individuals who see existing wealth gaps as fair tend to adjust their beliefs about how much inequality is acceptable to match the current situation, making them less likely to challenge economic disparities.

The role in workplace culture in shaping perceptions of inequality

Workplace culture can have an important influence on individuals' perceptions of inequality. A key aspect of workplace culture is the level of homogeneity. Firms that predominantly hire individuals from a similar background, like similar education levels, may unintentionally exclude minority groups, thereby compromising workforce diversity and restricting access to economic opportunities (Gimpelson & Treisman, 2018). Empirical evidence indicates that minority applicants encounter structural barriers in recruitment processes, which significantly contribute to long-standing labour

market inequalities (Quillian & Lee, 2023). Blommaert, Coenders, and Van Tubergen (2014) conducted a field experiment in the Netherlands, sending identical CVs to employers with only the applicant's name altered to reflect either a Dutch or Arabic background. Their findings revealed that Arabic-named applicants were significantly less likely to receive a callback, demonstrating discrimination in the hiring process. Similarly, studies in other countries have shown that gender also plays a role in hiring biases, with female applicants often facing disadvantages in male-dominated fields (Quillian & Lee, 2023). These biases create a workplace where everyone is similar, making it harder for marginalized groups to advance economically and maintaining existing inequalities in the job market.

A diverse workforce is required to advance inclusion, diversifying individuals' networks and ultimately reducing (perceived) inequality. Socioeconomic status plays an important role in access to education, professional connections, and future career opportunities—all of which shape workplace experience and perceptions of equity (Ingram, 2021). (In this context, equity refers to fairness in providing opportunities based on individuals' needs and circumstances, rather than treating everyone the same, as equality would suggest. For example, equity in the workplace might involve offering additional resources or support to employees from disadvantaged backgrounds to help them overcome barriers, whereas equality would mean giving everyone the same resources regardless of their starting point. By focusing on equity, we recognize that people face different challenges based on their socioeconomic status, and addressing these differences can help level the playing field in professional settings.) When organizations narrow their focus on applicants with equal socioeconomic and educational backgrounds, they risk reducing intellectual diversity and creativity (Mensi-Klarbach & Risberg, 2022). Furthermore, research shows that subjective experiences play a greater role in determining perceptions of inequality than objective economic indicators (Hauser & Norton, 2017; Knell & Stix, 2020), underlining the importance of diverse perspectives within organizational settings.

Furthermore, diverse teams contribute to more innovative problem-solving and creativity, as they bring varied perspectives to decision-making (Mensi-Klarbach & Risberg, 2022). A workplace culture that fosters inclusion and diversity can help reduce misperceptions of inequality by increasing exposure to different lived experiences. It also promotes a broader understanding of social and economic disparities. Furthermore, inequality is not only an abstract economic concept but also an experienced difference, meaning that individuals assess inequality through their immediate social interactions (Bowles & Carlin, 2020). Therefore, fostering a workplace culture that emphasizes diversity and equity can reshape perceptions of inequality, enhance social cohesion, and improve organizational outcomes.

Exposure to different economic groups and awareness of inequality

Firstly, respondents who know people who are rich **and** people who are poorer (V1) will perceive wealth inequality as higher compared to those who do not know people who are rich and people who are poor, but only know people similar to themselves. This could be related to exposure bias; people base their perception of inequality on the economic status of those in their social environment, leading to a limited and distorted perception (Zajonc, 1968), because people develop a preference for things they are frequently exposed to. Hauser and Norton (2017) found that Americans who are exposed to a broader array of socioeconomic groups are more likely to correctly perceive income inequality, compared to those with more homogeneous social networks who consistently underestimate it.

It is to be expected that the direct relationship between social situation (IV1) and the perception of wealth inequality (DV) will become (somewhat) weaker when taken into account one's exposure to inequality (V1). Exposure to inequality provides insight into who the respondent knows about the people around them being wealthy or poor, other than friends and colleagues. Friends and colleagues are not the only people one interacts with in life. Consider neighbours, acquaintances, and people encountered through mutual connections. The possible correlation may not disappear, but might weaken slightly when exposure to inequality is considered. People's beliefs are shaped by the environment they are directly exposed to (Hauser and Norton 2017). Exposure to diverse socioeconomic groups influences how individuals perceive inequality. Expanding social interactions to include a wider network could help balance the connection between one's social position and their perception of wealth inequality.

The impact of socioeconomic diversity on awareness of inequality

Having a more diverse social network in terms of socioeconomic status (SES) can improve the accuracy of perceptions of inequality. Exposure to people from various economic backgrounds allows individuals to see wealth disparities firsthand, rather than relying on abstract data or media representations. Bowles and Carlin (2020) describe inequality as an “experienced difference,” suggesting that interactions with diverse socioeconomic groups lead to more accurate perceptions of economic disparities. This contrasts with earlier hypotheses, which suggested that people with homogeneous social networks tend to underestimate inequality. Greater exposure to diverse groups improves the accuracy of one's perception, as it provides a clearer understanding of wealth distribution.

Interacting with both wealthy and lower-income individuals exposes people to the stark contrasts in economic conditions, providing a more direct and personal understanding of inequality. Jackson, Rogers, and Zenou (2017) emphasize that social networks play a critical role in shaping not only economic outcomes but also how individuals perceive these outcomes. This means that the diversity within one's social circle influences how people interpret and experience wealth disparities. For example, someone who regularly interacts with individuals from both ends of the socioeconomic spectrum is more likely to recognize the challenges faced by lower-income individuals and the privileges of wealthier ones. These interactions create a more nuanced understanding of economic conditions compared to individuals who are only surrounded by people from similar economic backgrounds, where the stark contrasts of wealth are less visible.

Moreover, these diverse interactions can challenge assumptions and bring to light experiences and perspectives that might otherwise go unnoticed, reinforcing the idea that a varied social network not only increases awareness of inequality but also encourages more accurate perceptions. Exposure to different economic realities within one's social circle promotes a more informed, less biased view of economic disparity, which may influence attitudes towards inequality and policy solutions (Jackson, Rogers, & Zenou, 2017; Bowles & Carlin, 2020).

Hypothesis 1: People who mainly have friends and colleagues with a similar level of education perceive wealth inequality as being lower than those with a more diverse social network.

Hypothesis 2: People who know both rich and poor individuals perceive wealth inequality as higher than those who only know similar people. (This effect will be weaker when considering broader social exposure beyond friends (IV1) and colleagues (IV2).)

An individual's perceived social and economic position influences their perceptions of inequality

One's social ladder position reflects their place in their social group and workplace, and this position influences how individuals perceive wealth inequality. Research shows that individuals who rate themselves higher on the social ladder tend to perceive wealth inequality as less extreme, while those who rate themselves lower are more likely to believe inequality is worse. Douenne, Sund, and van der Weele (2024) found that individuals' perceptions of inequality were directly influenced by their self-rated social rank; those who rated themselves higher on the social scale underestimated wealth inequality, while those lower on the scale overestimated it. This suggests that personal social placement significantly shapes perceptions of economic disparities. This relationship between social status and perceptions of inequality is supported by other studies. For instance, Hauser and Norton

(2017) observe that subjective emotions and social comparison play a strong role in shaping views of economic inequality, and Knell and Stix (2020) highlight that personal beliefs and societal standards also greatly influence how people perceive income distribution.

The role of system justification in individuals' perceived inequality based on social ladder placement

According to system justification theory (Jost, 2019; Jost, Banaji, & Nosek, 2004), individuals will justify existing social, economic, and political structures, even if such structures are not beneficial to them. This suggests that individuals from different socioeconomic backgrounds may justify inequality rather than oppose it.

Jost, Banaji, & Nosek, (2004) identify that individuals with strong system justification beliefs will be less prone to have high economic inequality perceptions, even when objective inequality is at a high point. This is able to explain why, for instance, poorer individuals in certain instances might not see inequality as a problem, which may appear paradoxical. Likewise, Gimpelson and Treisman (2018) found that the majority of people misperceive their economic position and the extent of income inequality, and this influences their perception about redistribution of wealth and social policy. These findings are consistent with the argument that social ladder position is a significant predictor of both social comparison and economic attitude.

Aside from this, research has also found that people of greater socioeconomic standing are more likely to justify the system as it benefits them immediately, justifying the idea that achievement comes by virtue of hard work and talent (Costa-Lopes, Dovidio, Pereira, & Jost, 2013). For example, a wealthy individual may attribute their success to their hard work and natural abilities, while overlooking or minimizing the role that systemic advantages, such as access to quality education or networks, may have played in their success.

On the other hand, individuals from lower socioeconomic backgrounds may also engage in system justification, but in this case, it serves as a defensive mechanism. When faced with overwhelming inequality, they may adopt the belief that the system is fair or inevitable, thereby reducing feelings of frustration or helplessness. This mindset can lead to internalized disadvantage, where subordinated groups begin to accept their social position and are less likely to support efforts aimed at creating change (Malahy, Rubinlicht, & Kaiser, 2009). For example, a person from a lower-income background may come to believe that their lack of wealth or status is deserved, leading to a resignation that perpetuates the status quo.

Hypothesis 3: Individuals' perceptions of inequality will be influenced by their social ladder position, with higher SES individuals justifying inequality and lower SES individuals either rationalizing it or recognizing it as a problem.

Summary and research approach

This theoretical framework has outlined how social networks, exposure to different economic groups, and self-perceived social status influence individuals' perceptions of wealth inequality. Research suggests that people assess inequality based on their immediate social circles, leading to distorted perceptions when their networks are homogeneous (Hauser & Norton, 2017; Knell & Stix, 2020). Additionally, system justification theory explains why individuals may rationalize existing inequalities, affecting their awareness of wealth disparities (Jost, 2019).

To test these ideas, this study will use an empirical approach, analysing survey data to examine how individuals' social environments, exposure to inequality, and self-placement on the social ladder shape their views on wealth inequality. By integrating theories of social comparison and system justification, this research will contribute to a better understanding of how subjective economic perceptions are formed. The findings may help policymakers and organizations address misperceptions of inequality by emphasizing the role of diverse social interactions and economic awareness in shaping public attitudes toward wealth distribution.

Methodological elaboration

Research population and sample

The LISS panel (Longitudinal Internet Studies for the Social Sciences) is particularly well-suited for research that requires an accurate representation of the Dutch population. It is built on a genuine probability sample of households, selected from the population register by Statistics Netherlands. Unlike other online panels, participation is by invitation only, and self-registration is not allowed.

In September 2020, the "*Nederlandse vraagstukken*" (Dutch Affairs) questionnaire was conducted through the LISS panel, inviting 1,839 panel members to participate, all 16 years and older. A total of 1,636 respondents fully completed the survey, resulting in an 89.0% response rate. The study, titled "*Social Inequality in the Netherlands: Perceptions, Attitudes, and Explanations*", aimed to explore how people perceive and explain social inequality in the Netherlands, as well as their attitudes toward it. The data file used for this particular study is labelled *vm20a*, and the research was funded by ODISSEI, OCW (Domeinplan SSH), and Erasmus University Rotterdam. The sample consisted of a randomly selected group of respondents who had also participated in the "*Political and Social Attitudes in the Netherlands*" and "*Implicit Association Test (IAT 2020) - Status Conflict in the Dutch Polder*" surveys. Of the 1,839 selected participants, 1,645 responded (89.5%), with 1,636 completing the survey (89.0%) and 9 providing incomplete responses (0.5%), while 194 did not respond (10.5%).

This research focuses on people who have colleagues and who have friends. All members of both ethnic minority and majority groups, male, female can be included, as long as they have a job (and colleagues). Based on the dataset, the codebook, and the information provided by LISS, this dataset appears to be a good representation for this research.

The respondents who do not have a job need to be filtered out, since this research is not about them. Those respondents are not relevant to my research question, which focuses on colleagues. Respondents without a job do not have colleagues. The variable who measures this is "Workplace educational homogeneity" (*vm20a040*). The respondents (score 9) were taken out. After removing the respondents who do not have a job, a total of 1,605 respondents (out of 1,636) remain and are included in this study. All 1,605 respondents completed the entire questionnaire, regardless of the experimental condition group they were in. Therefore, there is no non-response in the analysis of this study.

Research design

The questionnaire consisted of a combination of questions and statements in which respondents could express their opinions. It was administered online via the LISS panel. Respondents received an invitation by email and could complete the questionnaire at a time that suited them. The email invitation contained a unique link to the online questionnaire, ensuring that participation was personal and secure.

The questionnaire was structured into three sections. Respondents first answered general questions about their socioeconomic background, followed by the experimental manipulations and specific questions on perceptions of inequality.

Various methods were applied to ensure data quality to prevent respondents from rushing through the questionnaire, minimum time limits were set for certain sections. Depending on previous answers, respondents received specific follow-up questions, avoiding irrelevant questions. And to check whether respondents answered seriously, several control questions were included.

After completing the questionnaire, the data was automatically collected and stored in a secure database, after which a quality check was conducted to identify and, if necessary, remove invalid or inconsistent responses.

Reliability and validity of the research as a whole

One of the key considerations for external validity is whether the sample is representative of the broader population. The study utilizes data from the LISS panel, which is designed to be a probability sample of the Dutch population.

The response rate was 89%, which is relatively high, but there remains a 10.5% non-response rate. If non-respondents differ systematically from respondents, this could introduce bias. Certain subgroups (individuals with lower digital literacy or those with extreme socio-economic positions who do not own a laptop or computer) may be underrepresented. If these groups have systematically different views on wealth inequality, results may be distorted.

The timing of data collection (September 2020) may have influenced responses due to contemporary economic and political events. For example, the COVID-19 pandemic may have heightened awareness of economic disparities. The results are specific to the Netherlands, and caution must be exercised in generalizing findings to other countries with different social and economic structures.

Internal validity concerns whether the observed relationships in the study are due to the hypothesized explanatory variables rather than other confounding factors. The study controls for

experimental conditions using dummy variables, which helps isolate treatment effects. However, other uncontrolled variables could also influence responses. The causal direction of relationships may also be ambiguous; for instance, individuals' placement on the social ladder may shape their exposure to inequality rather than the other way around.

While the study has strong design elements, including a representative panel and high internal consistency in measurement scales, several threats to reliability and validity remain. Future research should consider: addressing selective non-response by assessing differences between respondents and non-respondents, exploring additional confounding variables to strengthen causal interpretations, and testing the robustness of findings across different time periods and cultural contexts to improve external validity.

Additionally, social desirability bias may play a role, especially in questions about inequality and social status. Respondents may provide answers that they perceive as socially acceptable rather than their true opinions. Some questions might be perceived as personal or intrusive, particularly those related to social status and economic inequality. Cultural differences can further shape how respondents interpret and respond to questions, impacting the validity of the results.

A lengthy questionnaire can also lead to respondent fatigue, reducing the consistency of responses, particularly in later sections of the survey. Furthermore, questions that require retrospective recall may suffer from memory distortions, further affecting reliability. If respondents struggle to accurately remember past experiences, inconsistencies may arise in the dataset.

Operationalisation

In this study, there are two different distinct, but associated paths: the social route and the economic route. There are two independent variables (one for the social situation and one for the economic situation). These two separate variables both lead to the dependent variable (perception of wealth inequality). The two explanatory variables help explain the differences in the perception of wealth inequality through both the social and economic situations. Below is a description of the variables chosen for this study.

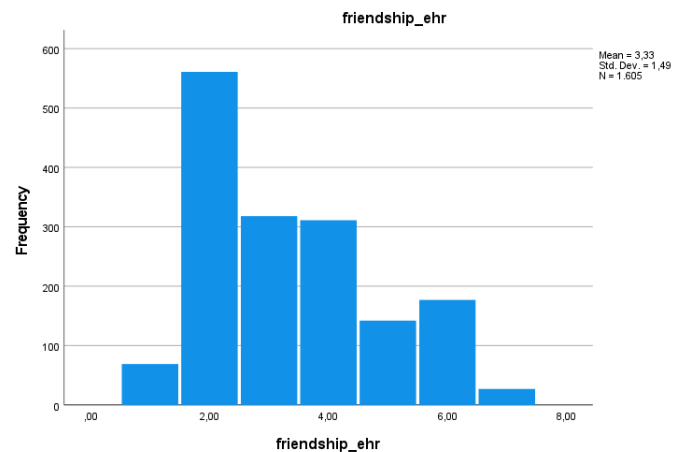
Friendship educational homogeneity (IV1) – ordinal

Social situation is measured by the statement: “Most of my friends have the same level of education as I have.” Respondents could answer with (1) Strongly agree, (2) Agree, (3) Somewhat agree, (4) Neither agree nor disagree, (5) Somewhat disagree, (6) Disagree, and (7) Strongly disagree.

For this variable, the scale is made the opposite of the original question. Instead of a high score indicating high homogeneity, a high score now signifies low homogeneity, in line with the other variables.

A high score indicates that the respondent has few friends with the same level of education as themselves, meaning lower homogeneity. The social variable is one of the independent

variables and is abbreviated as “Friendship educational homogeneity” (IV1). In the dataset, this variable is named vm20a037.



This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 4.66 (SD=1.495), which is reasonably centred. Most respondents selected score 2. Most respondents have friends with the same level of education as themselves.

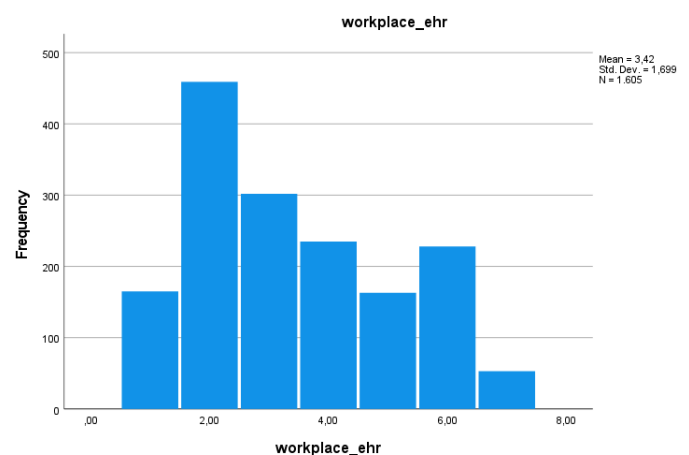
This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Workplace educational homogeneity (IV2) – ordinal

Economic situation is measured by the statement: “At work, most of my colleagues have/had the same level of education as I have.” Respondents could answer with (1) Strongly agree, (2) Agree, (3) Somewhat agree, (4) Neither agree nor disagree, (5) Somewhat disagree, (6) Disagree, and (7) Strongly disagree.

For this variable, the scale is made the opposite of the original question. Instead of a high score indicating high homogeneity, a high score now signifies low homogeneity, in line with the other variables.

A high score (except for score 9 which is filtered out because this applies to respondents who never held a job) indicates that the respondent has few colleagues with the same level of education, meaning lower homogeneity. The economic variable is one of the independent variables



and is abbreviated to “Workplace educational homogeneity” (IV2). In the dataset, this variable is named vm20a040.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 3,42 (SD=1,70), which is reasonably centred. Most respondents selected score 2. Most respondents have colleagues with the same educational level as themselves, but there are also a considerable number of respondents whose colleagues have different educational backgrounds.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

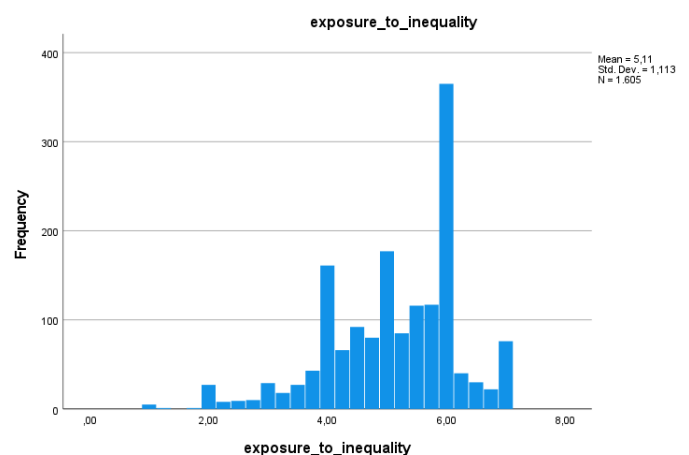
Exposure to inequality (V1) – ordinal

The variable used here will be a combination of four different variables that are merged to create a broader picture of exposure to wealth inequality. All four questions focus on the same theme: whether the respondent knows both wealthy and poor people in terms of vacations, housing size, the ability to afford good education for themselves and their children, and the possibility of saving money. All four variables share the same scale and have the same underlying meaning. The overarching name is “Exposure to inequality”.

Four questions from the codebook were merged into one single variable so that the average of the four can be used for a broader picture. All four questions focus on the same theme: whether the respondent knows both wealthy and poor people in terms of vacations, housing size, the ability to afford good education for themselves and their children, and the possibility of saving money. All four questions share the same scale and have the same underlying meaning. This way, a comprehensive variable can be created where all values are on the same scale. A high score will mean the same for each question—namely, that respondents know many people who are both poorer and wealthier.

This approach gives a richer understanding of the differences in exposure to wealth inequality. It makes the data more overarching and provides a broader perspective.

The scale is reliable (Cronbach’s Alpha = 0.836). All items contribute to the scale, so there is no reason to remove any item. The inter-item correlations are strong (ranging from 0.495 to 0.635), indicating that the items measure a coherent construct.



Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree.

This explanatory variable is abbreviated to “Exposure to inequality”. In the dataset, this variable is a combination of vm20a065, vm20a66, vm20a67, and vm20a68.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5,11 (SD=1,11), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford to go on holiday multiple times a year and people who cannot afford to.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The composite scale for Exposure to Inequality has a Cronbach’s Alpha of 0.836, indicating good internal consistency and enhancing reliability. In contrast, the other variables are measured with only a single question each. This can reduce reliability, as a single question is more susceptible to random errors and noise compared to a composite scale.

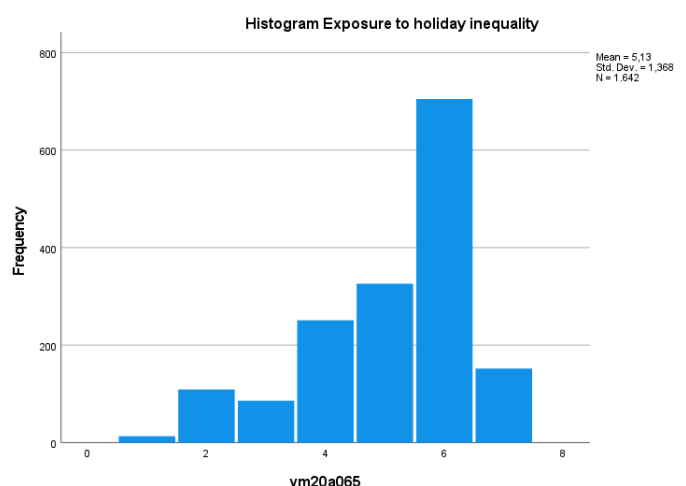
Below is a description of the four variables that were merged into one:

Exposure to holiday inequality – ordinal

The first part of the first explanatory variable is measured by the statement: “I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad .” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree.

A high score indicates that the respondent indeed knows people who can afford to go on holiday multiple times a year and people who cannot afford to, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to holiday inequality”. In the dataset, this variable is named vm20a065.

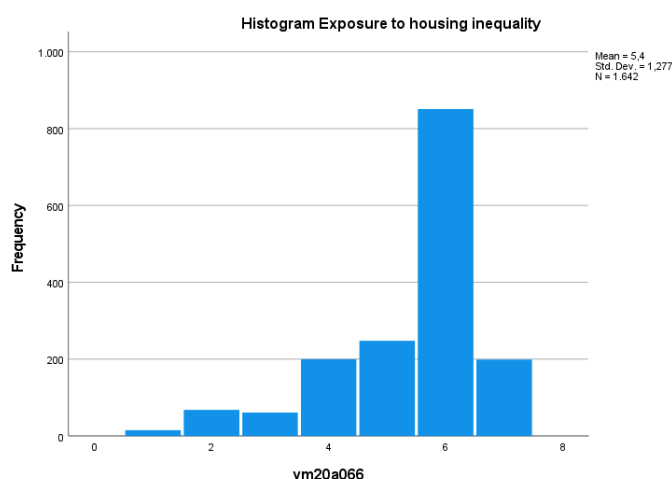
This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.12 (SD=1.3671), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford to go on holiday multiple times a year and people who cannot afford to.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Exposure to housing inequality – ordinal

The second part of the first explanatory variable is measured by the statement: “I know people who own large houses and people who live in small rental apartments.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who own large houses and people who live in rental housing, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to housing inequality”. In the dataset, this variable is named vm20a066.

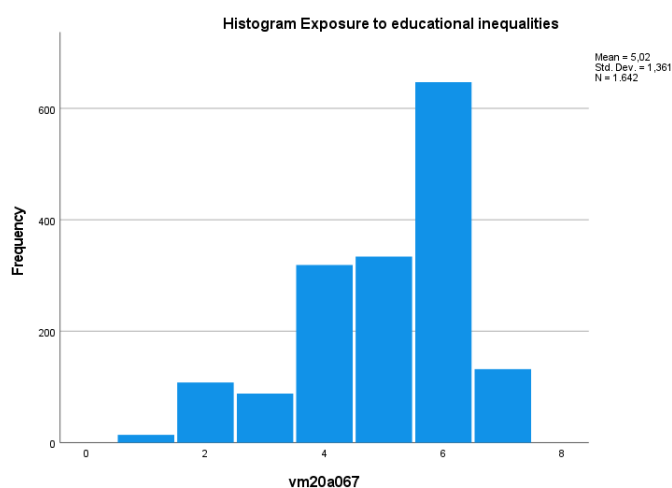


This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.40 (SD=1.279), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who own large houses and people who live in small rental apartments.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

3. Exposure to educational inequality – ordinal

The third part of the first explanatory variable is measured by the statement: “I know people who can afford a good education for themselves or their children and people who cannot.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford a good education for themselves or their children and people who cannot afford to, meaning lower homogeneity.



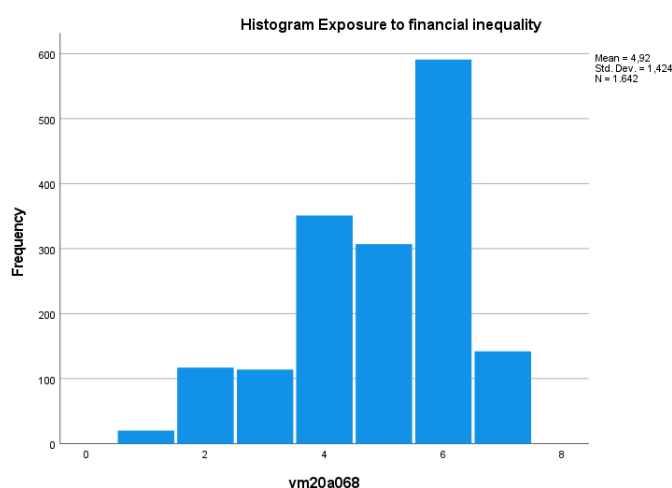
This explanatory variable is abbreviated as “Exposure to educational inequality”. In the dataset, this variable is named vm20a067.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.02 (SD=1.358), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford a good education for themselves or their children and people who cannot afford to.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

4. *Exposure to financial inequality – ordinal*

The fourth part of the first explanatory variable is measured by the statement: “I know people who can afford to save or invest money each month and people who don’t make ends meet.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford to save or invest money each month and people who don’t make ends meet, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to financial inequality”. In the dataset, this variable is named vm20a068.



This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 4.91 (SD=1.423), which is reasonably centred. Most respondents selected score 6, indicating that they know both people who can afford to save or invest money each month and people who don’t make ends meet.

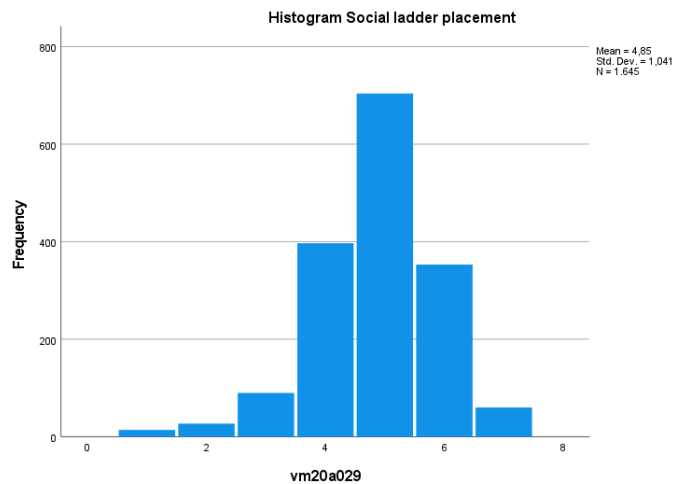
This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Social ladder placement (V2) – ordinal

The second explanatory variable is measured by the question: “Where would you put yourself on the ladder?” In our society, some groups tend to be towards the top (7), while others tend to be towards the bottom (1) of the social ladder. Respondents could answer with (1) Low, (2), (3), (4), (5), (6), and

(7) High. A high score indicates that a respondent places themselves high on the social ladder. This explanatory variable is abbreviated as “Social ladder placement” (V3). In the dataset, this variable is named vm20a029.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 4.87 (SD=1.03), which is reasonably centred. Most respondents selected score 5, indicating they place themselves at a moderately high position on the social ladder.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values.

The question *"Where would you put yourself on the ladder?"* is subjective and may be interpreted differently by respondents. This can lead to inconsistent answers, particularly if respondents are unsure about the definition of social status. Friendship Educational Homogeneity and Workplace Educational Homogeneity assume that respondents have an accurate perception of their friends' and colleagues' educational levels. However, in practice, this perception may vary, potentially undermining validity.

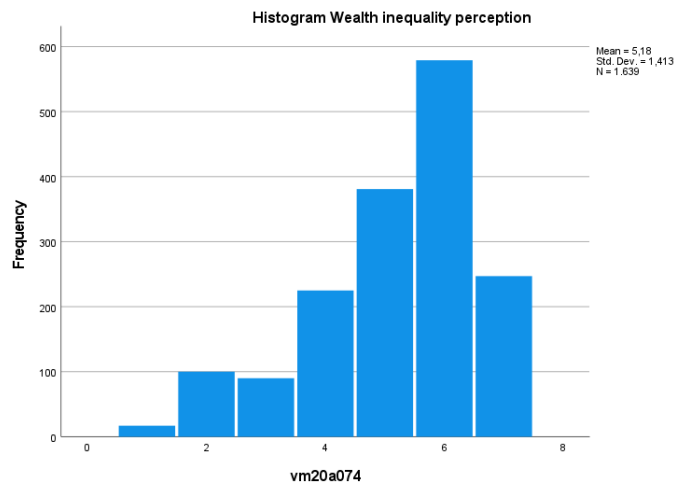
Moreover, Social Ladder Placement is based on self-perception and can be influenced by cultural or psychological factors. As a result, it may reflect subjective perception rather than objective social status. The dummy variables for experimental conditions may also affect responses. For instance, respondents in the Wealth Distribution group might become more aware of inequality, which could influence their answers to perception-related questions.

Wealth inequality perception (DV) – ordinal

The dependent variable is measured by the statement: “To what extent do you agree or disagree with the following statement? Differences in wealth in the Netherlands are too large.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent perceives wealth inequality as high. The dependent variable is abbreviated as “Wealth inequality perception” (DV). In the dataset, this variable is named vm20a074.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.17 (SD=1.42), which is centred a bit to the right. Most respondents selected score 6, indicating they agree that wealth inequality is high.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no any missing values. The variable appears to be valid.



Experimental condition

As part of the research design, participants were split into three different experimental conditions. One group saw information on the distribution of wealth, another group saw ethnic discrimination, and the third group saw sport (control condition) in the Netherlands. The question about wealth inequality perception (DV) was collected from participants after they saw the experiment stimuli, so that means the experimental condition group on the distribution of wealth must be taken into account. This experimental condition group is highly likely to impact the outcomes of the responses, as it can significantly influence how respondents answer compared to the control condition group. The respondents might have responded differently if they were not part of this experimental group. Therefore, it is essential to control for this experiment group.

Additionally, it is necessary to control for the ethnic discrimination experimental condition group as well. The respondents who were shown this condition might also be affected how they answered compared to if they had not been in this condition. It might have a smaller difference or effect on the responses and data than the distribution of wealth. Ethnic minorities often face more difficulties than those in the majority (Quillian & Lee, 2023). That is why it is important to control for this experimental group as well.

De derde experimentele groep fungeert eigenlijk als controle groep. Deze groep ging over sport en dit had verder “niks te maken” met mijn onderzoeksonderwerp.

For the three experimental groups, two dummies have been created.

Stimulus_dummy1 → compares the Ethnic discrimination group with the other two groups.

- 0 for Stimulus 1 (Distribution of wealth).

- 1 for Stimulus 2 (Ethnic discrimination).
- 0 for Stimulus 3 (Control: sport and exercise).

Stimulus_dummy2 → compares the control group with the other two groups.

- 0 for Stimulus 1 (Distribution of wealth).
- 0 for Stimulus 2 (Ethnic discrimination).
- 1 for Stimulus 3 (Control: sport and exercise).

If a respondent scores 0, they belong to the group of stimulus 1. If a respondent scores 1, they belong to the group of stimulus 2. In this case, the control group is stimulus 3 (in my study, this is called “dummy 2”).

Analysis design

This study examines how individuals’ social networks and their perceived social status relate to their perceptions of wealth inequality. To address this, a series of step-wise regression analyses will be carried out, aimed at testing both direct and potential indirect (mediated) effects of the main predictors.

Given that the dependent variable (Wealth inequality perception) is binary, the main analysis will use logistic regression. The model will be built in three steps:

- Model 1 includes the two independent variables: Friendship educational homogeneity and Workplace educational homogeneity.
- Model 2 adds the experimental conditions, entered as two dummy variables.
- Model 3 introduces two explanatory variables: Exposure to inequality and Social ladder placement. This step allows for testing their added predictive value and exploring whether they mediate the relationship between social homogeneity and inequality perception.

To evaluate model performance, changes in –2 Log Likelihood will be used, alongside the Hosmer-Lemeshow goodness-of-fit test. Multicollinearity will be checked using Variance Inflation Factor (VIF) scores to ensure the independence of predictors.

To explore potential mediation effects, two additional linear regression models will be estimated, treating the mediating variables as outcomes:

1. One model will predict Exposure to inequality.
2. A second model will predict Social ladder placement.

Both models will include the independent variables and control variables as predictors. These steps are necessary to establish whether the mediators are influenced by the independent variables — a basic requirement for mediation.

In addition to the regression results, predicted probabilities will be calculated based on the final logistic model. These probabilities help illustrate how likely different types of individuals perceive wealth inequality as a societal problem, based on combinations of key predictors. Since Friendship and Workplace Homogeneity are not expected to have substantial effects, they will be held constant at a moderate value (3). Other variables — such as Exposure to Inequality, Social Ladder Placement, and the experimental conditions — will be varied to highlight their substantive impact.

All analyses will be conducted in SPSS using syntax. Assumptions of logistic regression will be checked, including multicollinearity, leverage, and DFBeta values, to ensure the robustness and stability of the models. The outcomes of these analyses will guide the interpretation of the study's hypotheses and theoretical contributions.

Results

Descriptive statistics

Table 1: Descriptive statistics excluding missing values — mean, median, standard deviation, minimum, maximum, and percentiles.

	Mean	Standard Deviation	Minimum	Maximum	Percentiles			N total
					25	50	75	
Wealth								
inequality perception	5.17	1.42	1.00	7.00	4.00	6.00	6.00	1605
Friendship								
educational homogeneity	3.33	1.49	1.00	7.00	2.00	3.00	4.00	1605
Workplace								
educational homogeneity	3.42	1.70	1.00	7.00	2.00	3.00	5.00	1605
Exposure to inequality	5.11	1.11	1.00	7.00	4.25	5.25	6.00	1605
Social ladder placement	4.87	1.03	1.00	7.00	4.00	5.00	6.00	1605

Table 1 presents the key descriptive statistics of the variables used in this study. On average, respondents agree that wealth disparities in the Netherlands are large ($M = 5.17$), suggesting that most are aware of inequality. The distribution of this variable is fairly symmetrical, with no significant outliers.

Interestingly, most respondents report that their friends and colleagues have a similar level of education ($M = 3.3$ and 3.4). Exposure to inequality shows a relatively high mean ($M = 5.11$), indicating that many respondents interact socially with people from both poorer and wealthier economic backgrounds. As discussed in the theoretical framework, this kind of social diversity is

crucial: according to Bowles and Carlin (2020), inequality is an experienced difference — seeing contrasts in everyday life makes inequality visible.

Table 2: Correlations between continuous and categorical (experimental group) variables — the upper triangle shows correlations without missing values, while the lower triangle includes missing values.

	Wealth inequality perception	Friendship educational homogeneity	Workplace educational homogeneity	Exposure to inequality	Social ladder placement	Stimulus 1 (dummy 1)	Stimulus 2 (dummy 2)
Wealth inequality perception	-	-.012	-.012	.116**	-.083**	-.074**	-.076**
Friendship educational homogeneity	-.007	-	.328**	.088**	-.124**	-.040	.039
Workplace educational homogeneity	-.012	.329**	-	.069**	-.100**	-.030	.000
Exposure to inequality	.103**	.091**	.070**	-	.021	.001	.001
Social ladder placement	-.085**	-.133**	-.100**	.025	-	.022	.028
Stimulus 1 (dummy 1)	-.075**	-.136	-.030	.003	.022	-	-.503**
Stimulus 2 (dummy 2)	-.072**	.148	.035	.002	.035	-.500**	-

N = 1605.

N varies between 1605 and 1645.

p < .01 (two-sided test) indicated by **

Table 2 presents the correlations between all key variables in the study. While correlations do not imply causation, they provide an initial sense of the relationships between concepts and can help guide further analysis and theory development.

The correlations show that exposure to inequality is positively and significantly associated with perceptions of inequality ($r = .116^{**}$), providing some initial evidence in support of the study's prediction: increased visibility of economic differences leads to a stronger sense that inequality exists. This is a small but significant positive correlation, meaning that the more individuals are exposed to inequality (knowing both wealthy and poor people), the greater their perception of inequality tends to be.

Social ladder placement is modestly and negatively correlated with inequality perception ($r = -.085^{**}$). This suggests that those who place themselves lower on the social ladder are slightly more likely to perceive inequality as high.

The strongest correlation in Table 2 is between Friendship educational homogeneity and Workplace educational homogeneity ($r = .328^{**}$). This is both logical and expected: individuals who tend to have friends with similar education levels often work with colleagues of comparable backgrounds. This may point to broader social filters — such as education, profession, or social class — that shape the networks people form.

However, it is notable that these homogeneity variables show no strong correlation with Wealth inequality perception (both $r = -.012$), suggesting that educational homogeneity has limited predictive power for how individuals perceive inequality. Other forms of homogeneity (such as income, ethnicity, or ideology) may be more influential, or the relationship could be indirect — potentially mediated by factors like media consumption or political orientation.

The correlations between the experimental conditions and other variables are small, but some are statistically significant. For example, the negative correlation between experimental condition 1 (wealth distribution information) and Wealth inequality perception ($r = -.075^{**}$) suggests that the manipulation had an actual effect: participants exposed to inequality-related information reported higher perceptions of inequality.

Model evaluation

The logistic regression analysis provides three models that are incrementally expanded. Model 1 includes only the independent variables (friendship and workplace homogeneity), Model 2 adds the experimental conditions (stimulus 1 and stimulus 2), and Model 3 includes the explanatory variables (exposure to inequality and social ladder placement).

A key measure for model fit in logistic regression is the -2 Log Likelihood (-2LL). As shown in Table 3, the fit improves with each model. The decrease in -2LL indicates a better explanation of the dependent variable (Wealth inequality perception) with each added prediction block. The chi-square test for model comparison is significant in both Model 2 and Model 3 ($p < .001$), meaning that the additional (explanatory) variables (stimuli, exposure, and ladder position) substantially contribute to the prediction. This suggests that socio-structural factors and subjective position perception are more important than network conditions alone.

The Hosmer-Lemeshow test assesses the fit between the model and the observed data. In all three models, this test is not significant ($p > .05$), implying that there is no bad fit. This is important because it shows that the probability distributions in the model adequately align with the empirical reality of the respondents.

A key consideration in regression analysis is the degree of overlap between independent variables, or multicollinearity. This is tested using the Variance Inflation Factor (VIF). In these models, the VIF values range from 1.0 to 1.3, indicating that there is no problematic overlap between variables. This means that the predictors are sufficiently independent of each other to provide reliable estimates. For instance, despite the positive correlation between Friendship and Workplace homogeneity ($r = .328^{**}$), they do not overshadow each other in the model.

Additionally, outliers and cases with disproportionate influence on the model (leverage and DFBeta) were checked. While there are some observations with high leverage, the values remain below the critical threshold, and there are no outliers in DFBeta. This indicates that the model outcomes are robust, and no individual respondent distorts the overall regression relationships.

Theoretically, it is notable that the base model (Model 1) has limited predictive power — consistent with the earlier point that educational homogeneity in friendship and work alone is not strong enough to explain perceptions of inequality. It is only when structural exposure to inequality (Model 3) and subjective position are added that a meaningful explanatory model emerges. This confirms the assertion in the theoretical framework that the perception of inequality is not just a product of social networks, but also arises from broader economic experience and personal identification.

Hypothesis testing

Table 3: Logistic regression analysis where perception of wealth inequality is measured by the following variables.

	Model 1	Model 2	Model 3	VIF
--	---------	---------	---------	-----

	<i>b</i> (<i>SE</i>)	<i>p</i>	<i>b</i> (<i>SE</i>)	<i>p</i>	<i>b</i> (<i>SE</i>)	<i>p</i>	
Intercept	-0.043 (0.140)	0.759	0.448 (0.161)	0.005	0.135 (0.135)	0.717	-
Friendship educational homogeneity	0.004 (0.035)	0.903	0.006 (0.036)	0.862	-0.013 (0.037)	0.713	1.140
Workplace educational homogeneity	0.009 (0.031)	0.761	0.003 (0.032)	0.923	-0.008 (0.032)	0.800	1.129
Experimental condition 1			-0.719 (0.125)	0.001	-0.722 (0.126)	0.001	1.342
Experimental condition 2			-0.698 (0.125)	0.001	-0.694 (0.126)	0.001	1.343
Exposure to inequality					0.204 (0.047)	0.001	1.1011
Social ladder placement					-0.128 (0.050)	0.011	1.023
-2 Log likelihood	2224.850		2181.317		2156.284		
Chi-square	0.148	0.929	43.532	0.001	25.034	0.001	
Hosmer Lemeshow	12.972	0.113	7.949	0.438	10.776	0.215	
<i>N</i>	1605		1605		1605		

There are three models. Mediation is used in this analysis (Figure 1). In this context, mediation means identifying whether certain experiences—like exposure to inequality and social ladder placement—help explain why some people develop particular social preferences.

Model 1: Homogeneity in terms of friendship and workplace.

Model 2: + Experimental conditions.

Model 3: + Exposure to inequality and Social ladder position.

Hypothesis 1: People who mainly have friends and colleagues with a similar level of education perceive wealth inequality as lower than those with a more diverse social network.

This hypothesis is not empirically supported in this study. In the full model (Model 3), Friendship educational homogeneity was not a significant predictor ($\beta = -0.013$, $SE = 0.037$, $p = .713$), nor was Workplace educational homogeneity ($\beta = -0.008$, $SE = 0.032$, $p = .800$). This suggests that the educational homogeneity of one's social network has little to no influence on how people perceive inequality. This possibly suggests that people do not base their judgments about inequality solely on direct social contacts, but potentially also on media, ideology, or broader societal discourses. Neither variable significantly predicts perceptions of inequality across any of the models, and this pattern remains consistent regardless of experimental condition. The observed effects are not only statistically non-significant but also substantively negligible; changes in educational homogeneity do not meaningfully alter the predicted probabilities of perceiving inequality. These findings suggest that variation in the educational composition of one's social and professional networks does not meaningfully influence perceptions of wealth inequality. This challenges traditional assumptions derived from reference group theory and underscores the limited explanatory power of education-based homogeneity in shaping inequality perceptions within this sample.

Hypothesis 2: People who know both wealthy and poor individuals perceive wealth inequality as higher than those who only know similar people. (This effect is expected to be weaker when broader social exposure beyond friends (IV1) and colleagues (IV2) is considered.)

In Model 3, Exposure to inequality emerges as a significant and positive predictor of perceived wealth inequality ($\beta = 0.204$, $SE = 0.047$, $p = .001$). Individuals who are regularly exposed to people with widely varying economic resources—such as differences in vacations, housing, and educational opportunities—develop a more tangible sense of inequality. This variable shows the strongest and most consistent effect across all models and experimental conditions. Under the control condition (experiment 1 = 0, experiment 2 = 0), the probability of perceiving inequality increases from 0.524 to 0.713 for individuals with high exposure (Table 6). Even when either experimental manipulation is active, the increase in predicted probability remains similar, ranging from approximately 0.35 to 0.55—a consistent 20% increase (Table 6). These differences are substantial and underscore the practical importance of experiential exposure: individuals embedded in more socioeconomically diverse networks are 20–25% more likely to recognize inequality. This finding supports Hypothesis 2 and aligns with theoretical perspectives that emphasize lived experience over abstract structural indicators in shaping perceptions of inequality (Bowles & Carlin, 2020; Gimpelson & Treisman, 2018).

Hypothesis 3: Individuals' perceptions of inequality are influenced by their social ladder position, with higher SES individuals justifying inequality and lower SES individuals either rationalizing it or recognizing it as a problem.

This hypothesis is supported by the data. Social ladder placement is significantly and negatively associated with perceived wealth inequality ($\beta = -0.128$, $SE = 0.050$, $p = .011$), indicating that individuals who place themselves higher on the social ladder are less likely to perceive inequality. This finding is consistent with the predictions of system justification theory (Jost, 2019; Jost et al., 2004), which suggests that individuals—particularly those who benefit from the current system—are motivated to perceive the social and economic order as fair and legitimate. Even when controlling for Exposure to inequality and Experimental conditions, Ladder placement continues to exert a robust influence. Individuals who identify with lower social standing consistently report higher perceptions of inequality. For example, under the base condition (low exposure, control condition), the probability of perceiving inequality is 0.556 for those low on the ladder compared to 0.428 for those high on the ladder—a 13% difference (Table 6). This gap remains stable across experimental manipulations: with Experiment 1 active and high exposure, the probabilities are 0.579 (low ladder) versus 0.452 (high ladder); with Experiment 2 active, they are 0.587 versus 0.459, respectively (Table 6). These consistent differences reinforce Hypothesis 3 and suggest that individuals' relative social positioning shapes how they interpret structural inequality, with those in more advantaged positions less likely to acknowledge it—likely because recognizing inequality would challenge the legitimacy of their status.

Mediation

Tabel 4: Social ladder placement as dependent variable to determine mediation in linear regression..

	Model 1		Model 2		Model 3		VIF (M3)
	<i>b (SE)</i>	<i>P</i>	<i>b (SE)</i>	<i>P</i>	<i>b (SE)</i>	<i>p</i>	
Intercept	5.24 (0.071)	0.000	5.17 (0.081)	0.000	5.02 (0.137)	0.001	–
Friendship EHR	-0.07 (0.018)	0.001	-0.07 (0.018)	0.001	-0.07 (0.018)	0.001	1.13
Workplace EHR	-0.04 (0.016)	0.011	-0.04 (0.016)	0.013	-0.04 (0.016)	0.011	1.12
Stimulus Dummy 1			0.09 (0.063)	0.140	0.09 (0.063)	0.142	1.34
Stimulus Dummy 2			0.12 (0.063)	0.062	0.12 (0.063)	0.062	1.34

	Model 1		Model 2		Model 3		VIF (M3)
	<i>b (SE)</i>	<i>P</i>	<i>b (SE)</i>	<i>P</i>	<i>b (SE)</i>	<i>p</i>	
Exposure to Inequality					0.03 (0.023)	0.163	1.01
R ²	.019		.022		.023		
ΔR ²	–		.002		.001		
R ² aangepast	.018		.019		.020		
F-verandering	15.74***		1.94		1.95		
N	1605		1605		1605		

Table 5: Exposure to inequality as dependent variable to determine mediation in linear regression.

	Model 1		Model 2		Model 3		VIF (M3)
	<i>b (SE)</i>	<i>p</i>	<i>b (SE)</i>	<i>p</i>	<i>b (SE)</i>	<i>p</i>	
Intercept	4.83 (0.077)	0.000	4.82 (0.088)	0.000	4.63 (0.165)	0.0001	–
Friendship EHR	0.06 (0.02)	0.005	0.06 (0.02)	0.084	0.06 (0.02)	0.004	1.13
Workplace EHR	0.03 (0.017)	0.085	0.03 (0.017)	0.084	0.03 (0.017)	0.007	1.13
Stimulus Dummy 1			0.02 (0.068)	0.817	0.01 (0.068)	0.858	1.34
Stimulus Dummy 2			0.00 (0.068)	0.948	-1,25 ^E -5 (0.068)	1.000	1.34
Exposure to Inequality					0.04 (0.027)	0.163	1.02
R ²	.010		.010		.011		
ΔR ²	–		.000		.001		
R ² aangepast	.008		.007		.008		

	Model 1		Model 2		Model 3		VIF (M3)
	<i>b</i> (SE)	<i>p</i>	<i>b</i> (SE)	<i>p</i>	<i>b</i> (SE)	<i>p</i>	
F-verandering	7.80***		0.03		1.95		
N	1605		1605		1605		

To gain a better understanding of how the key explanatory variables in this study relate to one another, additional regression analyses were conducted. Specifically, the study examined whether the variables Exposure to inequality and Social ladder placement mediate the relationship between the independent variables (Friendship and Workplace educational homogeneity) and the dependent variable Wealth inequality perception. In other words, do friendship or workplace homogeneity first lead to greater or lesser exposure or a particular ladder position, which in turn explains perceptions of inequality? As will become evident, the results point in a different direction: there is no indication of mediation — the explanatory variables are, in themselves, sufficiently important in explaining perceptions of inequality, independently of social homogeneity in friendships or work environments.

Tables 4 and 5 assess whether Social ladder placement and Exposure to inequality can be explained by the independent variables (Educational homogeneity in friendships and the workplace) and the experimental stimuli. These analyses rely on linear regression, in contrast to the logistic regression used in Table 3. Linear regression is employed here because both outcome variables—Social ladder placement and Exposure to inequality—are continuous, making this method suitable for estimating the linear effects of the independent variables on these perceptions.

Both Friendship and Workplace homogeneity are modest but statistically significant predictors of Social ladder placement (Table 4). The effects are small (Friendship educational homogeneity: $\beta = -0.07$, SE = 0.018, $p = .001$; Workplace educational homogeneity: $\beta = -0.04$, SE = 0.016, $p = .011$) and remain stable across the three models. This indicates that individuals with more homogeneous networks tend to place themselves slightly lower on the social ladder, though the explained variance is minimal ($R^2 = 0.019$ in the base model, rising to 0.023 in Model 3).

For Exposure to inequality (Table 5), a similar pattern emerges. Again, the effects of Friendship and Workplace homogeneity are small but significant (Friendship educational homogeneity: $\beta = 0.06$, SE = 0.02, $p = .004$; Workplace educational homogeneity: $\beta = 0.03$, SE = 0.017, $p = .007$), suggesting that individuals with more homogeneous networks experience slightly less diverse environments.

However, the explanatory power of these models is again very limited ($R^2 = 0.010\text{--}0.011$). Although these relationships are statistically significant, the effect sizes are small. The increase in explained variance is practically negligible, meaning the added explanatory value of these potential mediators is very limited.

Table 3 shows that Friendship and Workplace homogeneity have no significant effects on inequality perception — in any of the models. In Model 3, the corresponding coefficients are close to zero (Friendship educational homogeneity: $\beta = -0.013$, $SE = 0.037$, $p = .713$; Workplace educational homogeneity: $\beta = -0.008$, $SE = 0.032$, $p = .800$). By contrast, Exposure to inequality ($\beta = 0.204$, $SE = 0.047$, $p = .001$) and Social ladder placement ($\beta = -0.128$, $SE = 0.050$, $p = .011$) emerge as statistically significant and substantively meaningful predictors of inequality perception.

The additional regressions presented in Tables 4 and 5 help to confirm that there is no meaningful mediation: Friendship and Workplace homogeneity explain only a very small portion of the variance in Exposure and Ladder placement, and these effects do not translate into indirect effects on inequality perception. On the contrary, the strongest predictors of perception are Exposure and Ladder placement themselves.

Probabilities of perceiving wealth inequality based on exposure to inequality, experimental conditions, and social ladder placement

Here are the probabilities for the explanatory variables (Exposure to inequality and Social ladder placement). Because the independent variables do not have an effect, they are not included in the probabilities. These independent variables have the value 3, so that they remain constant.

Table 6: Probabilities of the variables Exposure to inequality, the experimental conditions, and Social ladder placement having Wealth inequality perception as dependent variable.

experiment 1 (0)		experiment 2 (0)	
exposure to in.	low	0,524	0,524
(The rest 3)	high	0,713	0,713
experiment 1 (1)		experiment 2 (0)	
exposure to in.	low	0,348	0,348
(The rest 3)	high	0,547	0,547
experiment 1 (0)		experiment 2 (1)	

exposure to in.	low	0,355	0,355
(The rest 3)	high	0,554	0,554
		social ladder Low	social ladder High
exposure to in.	low	0,556	0,428
(experiment 1 (0)	high	0,739	0,629
experiment 2 (0))			
		social ladder Low	social ladder High
exposure to in.	low	0,378	0,267
(experiment 1 (1)	high	0,579	0,452
experiment 2 (0))			
		social ladder Low	social ladder High
exposure to in.	low	0,385	0,272
(experiment 1 (0)	high	0,587	0,459
experiment 2 (1))			

Table 6 presents predicted probabilities derived from the regression models, offering a clearer understanding of the substantive effects of the key explanatory variables. Unlike regression coefficients, which can be abstract, predicted probabilities translate model outputs into intuitive terms—showing how likely individuals are to perceive inequality under different conditions. This makes it easier to interpret and compare the practical impact of each variable. Across all experimental conditions, individuals with high exposure to inequality consistently show a substantially higher likelihood of perceiving wealth inequality as problematic. Specifically, this probability increases by approximately 19 to 20% compared to those with low exposure, regardless of whether experiment condition 1 or 2 is shown. This underscores the independent role of exposure in shaping perceptions of inequality.

Since the variables Friendship educational homogeneity and Workplace educational homogeneity have little to no effect, they were held constant at a value of 3, which represents a moderate level. The remaining variables were systematically set to either high or low values, depending on the experimental conditions under consideration.

Additionally, both experimental manipulations appear to lower the baseline probability of perceiving inequality among individuals with low exposure—from 52.4% in the control group to roughly 35%

under experimental conditions—suggesting that the experimental framing may not sufficiently compensate for a lack of direct social comparison. Social ladder placement also influences perception: those who position themselves lower on the social ladder are more likely to perceive inequality as a problem than those who rank themselves higher. This effect holds true under both low and high exposure conditions and aligns with theories of relative deprivation and system justification. Taken together, the probabilities highlight that both subjective exposure to inequality and perceived social status are more powerful determinants of inequality perception than the experimental conditions themselves.

Conclusion and discussion

This study aimed to test how individuals' current social and economic situations relate to their perceptions of wealth inequality, by drawing mainly on theories of reference group comparison and system justification. Theory suggests that people may underestimate inequality because they tend to compare themselves primarily with others in similar circumstances (Hauser & Norton, 2017; Knell & Stix, 2020), and because they are motivated to rationalize the existing system as fair (Jost, 2019; Jost, Banaji, & Nosek, 2004). The study was also situated within a broader social debate — namely, the increasing concern about inequality in the Netherlands and its potential societal consequences (Lutz, 2025). By examining how different social positions and exposures influence inequality perceptions, this study contributes to understanding why public concern about inequality may lag behind actual levels of disparity, and helps explain the psychological and contextual barriers that can prevent collective awareness or demand for policy change.

Conclusion

Educational homogeneity has no impact on perceived inequality

People who mainly have friends and colleagues with a similar level of education perceive wealth inequality as being lower than those with a more diverse social network.

Reference group theory suggests that people evaluate inequality by comparing themselves to those around them. Social homogeneity—especially in terms of education—limits exposure to diverse socioeconomic realities, which can distort or mute perceptions of inequality (Hauser & Norton, 2017; Knell & Stix, 2020). Accordingly, people embedded in homogeneous networks may underestimate inequality because they lack contrasting reference points.

Theory suggested that greater educational homogeneity among friends and colleagues would be associated with weaker perceptions of inequality. However, this finding does not provide support for the first hypothesis. Neither friendship nor workplace educational homogeneity significantly predicted perceptions of wealth inequality. Even in the fully controlled model, both Friendship and Workplace educational homogeneity had negligible effects. The lack of effect could be due to the limited scope of homogeneity measurement. As Bowles and Carlin (2020) argue, inequality is best understood as an “experienced difference,” not just an abstract social construct. Educational background may not be sufficient to capture the meaningful dimensions of socioeconomic diversity that influence perceptions. Other factors—such as income, ethnicity, or ideology—may have more powerful impacts (Quillian & Lee, 2023; Costa-Lopes et al., 2013). Moreover, system-justifying tendencies and broader media or political discourse may override the influence of personal network structure (Jost, 2019).

Exposure to inequality increases perceived wealth inequality

People who know both rich and poor individuals perceive wealth inequality as higher than those who only know similar people.

The theory of social exposure to both rich and poor people suggests that awareness of inequality increases when people interact with others across economic lines. Bowles and Carlin (2020) highlight that inequality is most visible through direct experience, while Gimpelson and Treisman (2018) show that limited exposure can lead to misperceptions of inequality.

Theory suggested that individuals with greater exposure to both wealthy and poor people would report stronger perceptions of inequality. This finding provides support for the second hypothesis. Exposure to inequality had a significant and positive effect on perceived wealth inequality. Respondents who knew people from both ends of the socioeconomic spectrum were much more likely to consider inequality a serious issue. This confirms that lived experience plays a crucial role in shaping inequality perceptions. Those with diverse social exposure are more likely to notice systemic disparities, aligning with findings from Jackson, Rogers, and Zenou (2017), who argue that social networks influence both outcomes and awareness.

Perceived wealth inequality declines with rising social ladder position

Individuals' perceptions of inequality are influenced by their social ladder position, with higher SES individuals justifying inequality and lower SES individuals either rationalizing it or recognizing it as a problem.

System justification theory posits that individuals tend to legitimize the existing socioeconomic order. Higher-SES individuals may be more likely to perceive the system as fair because they benefit from it (Jost, 2019; Costa-Lopes et al., 2013), while lower-SES individuals may recognize inequality more acutely or adopt system-justifying beliefs as a coping strategy (Malahy et al., 2009). Moreover, system justification operates in both directions. As Malahy et al. (2009) describe, individuals in lower social positions may also justify the system — not out of genuine belief, but as a psychological defence mechanism: "If the system is unfair and I've failed, then I'm a victim — and that hurts." Thus, they prefer to believe the system "works as it should," to avoid feelings of helplessness. However, this latter group seems less dominant in the data: the negative relationship between social ladder position and perceived wealth inequality primarily confirms the influence of SES on cognitive justification.

Theory suggested that people who place themselves higher on the social ladder would perceive less inequality, while those who see themselves as lower would perceive more. This finding provides support for the third hypothesis. Self-placement on the social ladder significantly predicted perceived. This aligns with system justification theory and the idea that privileged individuals may minimize inequality to preserve their sense of merit and fairness (Jost et al., 2004). Lower-status individuals, by contrast, are more likely to experience inequality as a lived reality and thus see it more clearly (Hauser & Norton, 2017; Douenne et al., 2024).

Concluding remarks

To return to the central research question — *How does an individual's current social and economic situation impact their perception of wealth inequality?* — this study finds that perceptions are shaped less by structural similarity within networks, and more by exposure to economic contrasts and subjective social position. These results highlight that wealth inequality is not merely a matter of economic distribution but also of social visibility and individual interpretation. This research thus adds to sociological insights into the construction of social reality, showing that perceptions of inequality are shaped at the intersection of structure, experience, and belief — a finding that invites further exploration into how social conditions influence what people see as fair, just, or problematic in contemporary society.

Discussion

Limitations of the dataset

The way that homogeneity was measured may have been too superficial to capture real differences in network influence. Specifically, the operationalization relied on self-reported educational similarity

within friendship and workplace networks, which may not fully reflect the complexity of individuals' social environments. Educational homogeneity does not necessarily account for other influential factors such as political views, economic status, cultural background, or frequency and depth of interaction. As a result, the measure may overlook more meaningful dimensions of social influence that shape perceptions of inequality. Two people with similar educational backgrounds may still differ significantly in income or political orientation, leading to different understandings of fairness and injustice. Additionally, Knell and Stix (2020) argue that perceptions of inequality are shaped primarily by one's immediate social context rather than objective economic conditions, meaning that limited or superficial measures of similarity—like education—fail to capture how nuanced and diverse social experiences really are. As such, relying solely on educational homogeneity risks missing more meaningful social influences that could explain variation in how inequality is perceived. This limitation could help explain the weak and non-significant findings related to educational homogeneity, and suggests the need for more nuanced or multidimensional indicators of network composition in future research.

Methodological considerations

While the study uses a large, representative sample from the Dutch LISS panel, several limitations remain. First, the cross-sectional design prevents causal inference. It remains unclear whether people's environment shapes their perception, or whether those with certain views are more likely to seek out particular social contexts. Future research could use experimental or quasi-experimental methods—like natural experiments or instrumental variables—and incorporate qualitative insights to strengthen causal claims.

Second, many of the key variables included in the study are based on self-reports, including perceptions of friends' and colleagues' educational background, social ladder placement, and perceived inequality. These measures rely on individuals' subjective assessments, which may be biased or inaccurate. Notably, research has shown that people often misjudge their own economic position, which can systematically affect how inequality is perceived (Gimpelson & Treisman, 2018). To address this, future studies could complement self-reports with objective data—such as verified educational records, income statistics, or social network analyses—to reduce bias and improve accuracy.

Third, network homogeneity was measured only by education, omitting factors like income, ethnicity, or ideology. These factors may also potentially shape how people perceive inequality: income affects fairness judgments, ethnicity influences discrimination experiences, and ideology shapes whether

inequality is seen as justified (Bowles & Carlin, 2020; Jost, 2019). Excluding these may explain the limited network effects observed.

Finally, while the experimental manipulation had significant effects, they were smaller than those of subjective exposure and perceived status. This highlights that structural conditions and ongoing social interactions have a deeper, more lasting influence than short-term informational prompts (Knell & Stix, 2020; Du & King, 2022). Changing inequality perceptions likely requires engaging with these deeper experiences.

Although this study does not find evidence that educationally homogeneous networks influence perceptions of inequality, it does underscore the importance of exposure to economic diversity and subjective status. These findings have potential implications for future research and social policy. Interventions aimed at raising awareness of inequality may benefit from fostering interactions across class lines or encouraging critical reflection on personal social standing, rather than focusing solely on providing statistical information. Future research could build upon these findings by employing longitudinal designs to assess causal direction, expanding the operationalisation of social homogeneity to include multiple social dimensions, and incorporating media consumption, political orientation, or cultural capital as potential moderators.

Literature references

- Blommaert, L., Coenders, M., & van Tubergen, F. (2014). Discrimination of Arabic-Named Applicants in the Netherlands: An Internet-Based Field Experiment Examining Different Phases in Online Recruitment Procedures. *Social Forces*, 92(3), 957–982. <https://doi-org.proxy-ub.rug.nl/10.1093/sf/sot124>
- Bowles, S., & Carlin, W. (2020). Inequality as experienced difference: A reformulation of the Gini coefficient. *Economics Letters*, 186. <https://doi.org/10.1016/j.econlet.2019.108789>
- Costa-Lopes, R., Dovidio, J. F., Pereira, C. R., & Jost, J. T. (2013). Social psychological perspectives on the legitimization of social inequality: Past, present and future. *European Journal of Social Psychology*, 43, 229–237. <https://doi.org/10.1002/ejsp.1966>
- Douenne, T., Sund, O. & Van Der Weele, J. J. (2024). Do people distinguish income from wealth inequality? Evidence from the Netherlands. *World Inequality Lab*. 1-44. https://prod.wid.world/www-site/uploads/2024/05/WorldInequalityLab_WP2024_15_Do-People-Distinguish-Income-from-Wealth-Inequality_Evidence-from-the-Netherlands_Final.pdf
- Du, H., & King, R. B. (2022). What predicts perceived economic inequality? The roles of actual inequality, system justification, and fairness considerations. *The British Journal of Social Psychology*, 61(1), 19–36. <https://doi.org/10.1111/bjso.12468>
- García-Sánchez, E., Van der Toorn, J., Rodríguez-Bailón, R., & Willis, G. B. (2019). The Vicious Cycle of Economic Inequality: The Role of Ideology in Shaping the Relationship Between “What Is” and “What Ought to Be” in 41 Countries. *Social Psychological and Personality Science*, 10(8), 991–1001. <https://doi.org/10.1177/1948550618811500>
- Gimpelson, V., & Treisman, D. (2018). Misperceiving inequality. *Economics & Politics*, 30(1), 27–54. <https://doi.org/10.1111/ecpo.12103>
- Hauser, O. P., & Norton, M. I. (2017). (Mis)perceptions of inequality. *Current Opinion in Psychology*, 18, 21–25. <https://doi.org/10.1016/j.copsyc.2017.07.024>
- Ingram, P. (2021). The Forgotten Dimension of Diversity. *Harvard Business Review*, 99(1), 58–67.
- Jackson, M. O., Rogers, B. W., & Zenou, Y. (2017). The Economic Consequences of Social-Network Structure. *Journal of Economic Literature*, 55(1), 49–95. <https://doi.org/10.1257/jel.20150694>

- Jost, J. T. (2019). A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *British Journal of Social Psychology*, 58(2), 263–314.
<https://doi.org/10.1111/bjso.12297>
- Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo. *Political Psychology*, 25(6), 881–919. <https://doi.org/10.1111/j.1467-9221.2004.00402.x>
- Kakwani, N. (1984). The Relative Deprivation Curve and Its Applications. *Journal of Business & Economic Statistics*, 2(4), 384–394. <https://doi.org/10.2307/1391280>
- Knell, M., & Stix, H. (2020). Perceptions of inequality. *European Journal of Political Economy*, 65.
<https://doi.org/10.1016/j.ejpoleco.2020.101927>
- Liss. (2025). The Panel. About the panel. <https://www.lissdata.nl/about-panel>
- Lutz, E. (2025). Bernie Sanders Is Packing Arenas on His Anti-oligarchy Tour: “People Are Really, Really Concerned”. *Vanityfair*. https://www.vanityfair.com/news/story/bernie-sanders-anti-oligarchy-tour?srsId=AfmBOorWRQcJ_L7sEBEZRWMJGSn_wTH0jwyDuCYTzuycOXZwNRTAM15g
- Malahy, L. W., Rubinlicht, M. A., & Kaiser, C. R. (2009). Justifying inequality: A cross-temporal investigation of US income disparities and just-world beliefs from 1973 to 2006. *Social Justice Research*, 22, 369–383. <https://doi.org/10.1007/s11211-009-0103-6>
- Mensi-Klarbach, H., & Risberg, A. (2022). *Diversity in organizations: concepts and practices* (Second edition, reprinted). Bloomsbury Academic.
- Quillian, L., & Lee, J. J. (2023). Trends in racial and ethnic discrimination in hiring in six Western countries. *Proceedings of the National Academy of Sciences*, 120(6).
<https://doi.org/10.1073/pnas.2212875120>
- Willis, G. B., Rodríguez-Bailón, R., López-Rodríguez, L., & García-Sánchez, E. (2015). Legitimacy Moderates the Relation Between Perceived and Ideal Economic Inequalities. *Social Justice Research*, 28(4), 493–508. <https://doi.org/10.1007/s11211-015-0253-7>
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9(2, Pt.2), 1–27. <https://doi.org/10.1037/h0025848>

Attachment 1

Attachment 1 provides an overview of all data used in this study. It includes the original, unedited questions, any modifications made, and the outcome variables. Except for the headers, all SPSS output is presented as originally generated, with comments integrated directly into the SPSS syntax.

To obtain the descriptive statistics for these variables, the following command was entered in SPSS:

*frequency tables for all my variables

FREQUENCIES VARIABLES=friendship_educational_homogeneity

workplace_educational_homogeneity

exposure_to_inequality wealth_inequality_perception social_ladder_placement

/STATISTICS=STDDEV SEMEAN MEAN

/BARCHART FREQ

/ORDER=ANALYSIS.

Statistics for all variables with missing data

		friendship_educational_homogeneity	workplace_educational_homogeneity	exposure_to_inequality	wealth_inequality_perception	social_ladder_placement
N	Valid	1644	1610	1642	1639	1645
	Missing	1	35	3	6	0
Mean		4,66	4,58	5,1174	5,18	4,85
Std. Error of Mean		,037	,042	,02741	,035	,026
Std. Deviation		1,495	1,697	1,11063	1,413	1,041

Description original variables

Friendship educational homogeneity (IV1)

*frequency tables for all my variables

FREQUENCIES VARIABLES=friendship_educational_homogeneity

workplace_educational_homogeneity

```

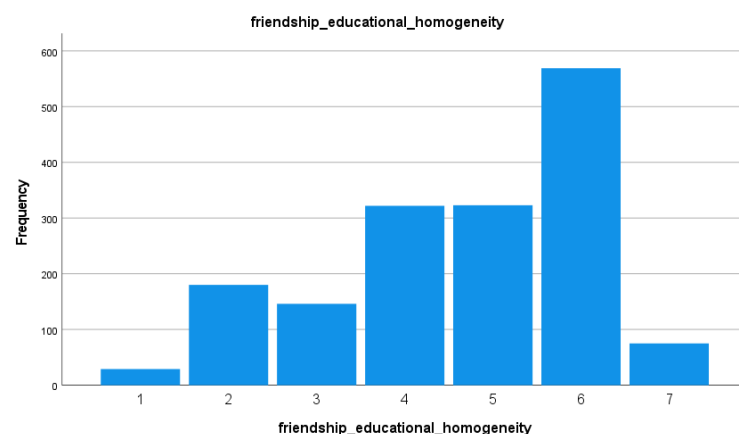
exposure_to_inequality wealth_inequality_perception social_ladder_placement
/STATISTICS=STDDEV SEMEAN MEAN
/BARCHART FREQ
/ORDER=ANALYSIS.

```

Most of my friends have the same level of education as I have.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	29	1,8	1,8	1,8
	2	180	10,9	10,9	12,7
	3	146	8,9	8,9	21,6
	4	322	19,6	19,6	41,2
	5	323	19,6	19,6	60,8
	6	569	34,6	34,6	95,4
	7	75	4,6	4,6	100,0
	Total	1644	99,9	100,0	
Missing	System	1	,1		
Total		1645	100,0		

The social situation is measured by the statement: “Most of my friends have the same level of education as I have.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent has many friends with the same level of education as themselves, meaning higher homogeneity. The social variable is one of the independent variables and is abbreviated as “Friendship educational homogeneity” (IV1). In the dataset, this variable is named vm20a037.



This variable was answered by 1644 (out of 1645) respondents. The question has a range of 6 (1-7), and the mean of this variable is 4.66 (SD=1.495), which is reasonably centred. Most respondents selected score 6. Most respondents have friends with the same level of education as themselves.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.

Workplace educational homogeneity (IV2)

*frequency tables for all my variables

FREQUENCIES VARIABLES=friendship_educational_homogeneity
workplace_educational_homogeneity

exposure_to_inequality wealth_inequality_perception social_ladder_placement

/STATISTICS=STDDEV SEMEAN MEAN

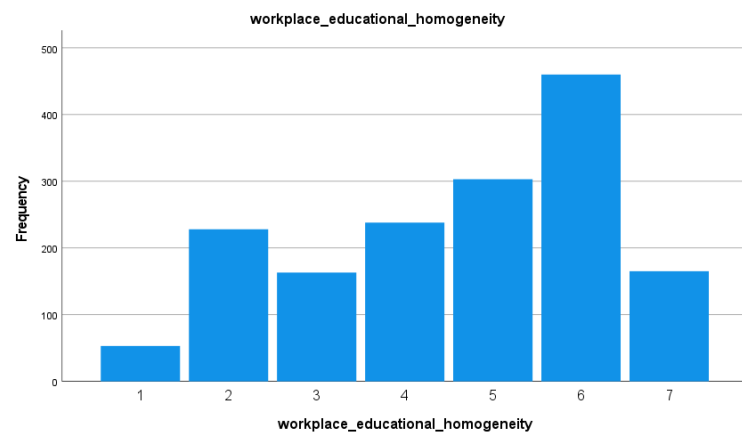
/BARCHART FREQ

/ORDER=ANALYSIS.

At work, most of my colleagues have/had the same level of education as I have.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	53	3,2	3,3	3,3
	2	228	13,9	14,2	17,5
	3	163	9,9	10,1	27,6
	4	238	14,5	14,8	42,4
	5	303	18,4	18,8	61,2
	6	460	28,0	28,6	89,8
	7	165	10,0	10,2	100,0
	Total	1610	97,9	100,0	
Missing	9	34	2,1		
	System	1	,1		
	Total	35	2,1		
Total		1645	100,0		

The economic situation is measured by the statement: “At work, most of my colleagues have/had the same level of education as I have.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, (7) Strongly agree, and (9) I never held a job. A high score (except for 9) indicates that the respondent has many colleagues with the same



level of education, meaning higher homogeneity. Score 9 applies to respondents who never held a job. This score might need to be filtered out, as it does not pertain to the study since these respondents have no colleagues. However, it could be relevant for a sub-question. The economic variable is one of the independent variables and is abbreviated as “Workplace educational homogeneity” (IV2). In the dataset, this variable is named vm20a040.

This variable was answered by 1644 (out of 1645) respondents. The question has a range of 8 (1-7, 9), and the mean of this variable is 4.68 (SD=1.793), which is reasonably centred. Most respondents selected score 6. Most respondents have colleagues with the same educational level as themselves, but there are also a considerable number of respondents whose colleagues have different educational backgrounds. Only a few respondents selected score 9, likely indicating respondents under 18 years old.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.

Exposure to inequality (V1)

*frequency tables for all my variables

```
FREQUENCIES VARIABLES=friendship_educational_homogeneity
workplace_educational_homogeneity
```

```
    exposure_to_inequality wealth_inequality_perception social_ladder_placement
```

```
/STATISTICS=STDDEV SEMEAN MEAN
```

```
/BARCHART FREQ
```

```
/ORDER=ANALYSIS.
```

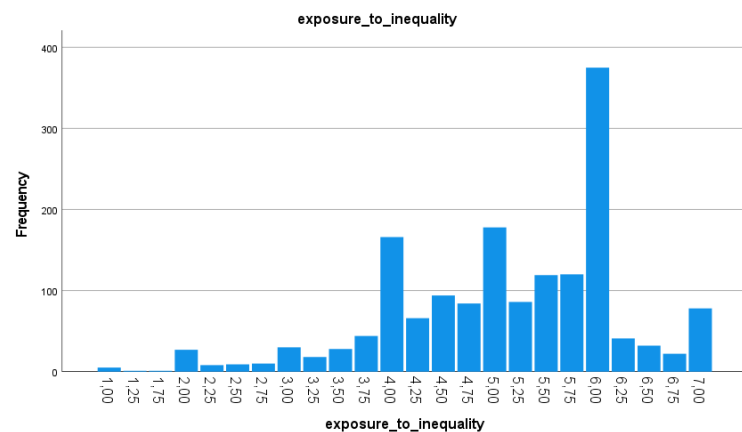
Exposure to inequality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	5	,3	,3	,3
	1,25	1	,1	,1	,4
	1,75	1	,1	,1	,4
	2,00	27	1,6	1,6	2,1
	2,25	8	,5	,5	2,6
	2,50	9	,5	,5	3,1
	2,75	10	,6	,6	3,7
	3,00	30	1,8	1,8	5,5
	3,25	18	1,1	1,1	6,6
	3,50	28	1,7	1,7	8,3
	3,75	44	2,7	2,7	11,0
	4,00	166	10,1	10,1	21,1
	4,25	66	4,0	4,0	25,2
	4,50	94	5,7	5,7	30,9
	4,75	84	5,1	5,1	36,0
	5,00	178	10,8	10,8	46,8
	5,25	86	5,2	5,2	52,1
	5,50	119	7,2	7,2	59,3
	5,75	120	7,3	7,3	66,6
	6,00	375	22,8	22,8	89,5
	6,25	41	2,5	2,5	92,0
	6,50	32	1,9	1,9	93,9
	6,75	22	1,3	1,3	95,2
	7,00	78	4,7	4,8	100,0
	Total	1642	99,8	100,0	

Missing	System	3	,2		
Total		1645	100,0		

The variable I am using here will be a combination of four different variables that I am merging to create a broader picture of exposure to wealth inequality. All four questions focus on the same theme: whether the respondent knows both wealthy and poor people in terms of vacations, housing size, the ability to afford good education for themselves and their children, and the possibility of saving money. All four variables share the same scale and have the same underlying meaning. The overarching name is “Exposure to inequality”.

This explanatory variable is measured by the four statements: “I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad”, “I know people who own large houses and people who live in small rental apartments”, “I know people who can afford a good education for themselves or their children and people who cannot”, and “I know people who can afford to save or invest money each month and people who don’t make ends meet.”



Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford to go on holiday multiple times a year and people who cannot afford to, meaning lower homogeneity. A high score indicates that the respondent indeed knows people who own large houses and people who live in rental housing, meaning lower homogeneity. A high score indicates that the respondent indeed knows people who can afford a good education for themselves or their children and people who cannot afford to, meaning lower homogeneity. A high score indicates that the respondent indeed knows people who can afford to save or invest money each month and people who don’t make ends meet, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to inequality”. In the dataset, this variable is a combination of vm20a065, vm20a66, vm20a67, and vm20a68.

This variable was answered by 1642 (out of 1645) respondents. The question has a range of 6 (1-7), and the mean of this variable is 5,12 (SD=1,11), which is reasonably centred but slightly on the higher

side. Most respondents selected score 6, indicating that they know both people who can afford to go on holiday multiple times a year and people who cannot afford to.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid (Cronbach's Alpha = 0.836).

Exposure to holiday inequality

* the four separate variables of Exposure to inequality

DATASET ACTIVATE DataSet2.

FREQUENCIES VARIABLES=exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality exposure_to_financial_inequality

/STATISTICS=STDDEV MEAN

/ORDER=ANALYSIS.

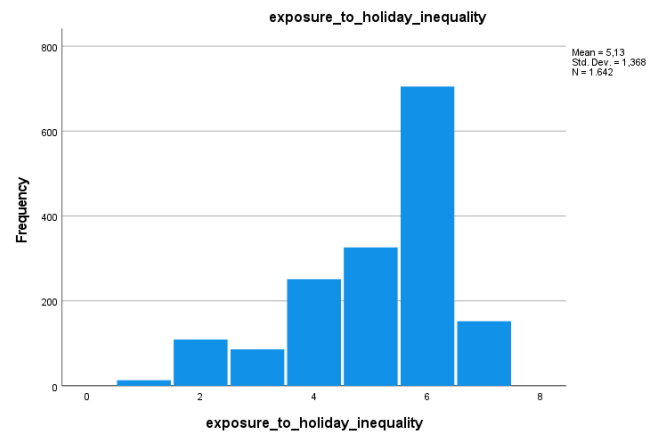
I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	,8	,8	,8
	2	109	6,6	6,6	7,4
	3	86	5,2	5,2	12,7
	4	251	15,3	15,3	28,0
	5	326	19,8	19,9	47,8
	6	705	42,9	42,9	90,7
	7	152	9,2	9,3	100,0
	Total	1642	99,8	100,0	
Missing	System	3	,2		
Total		1645	100,0		

The first part of the first explanatory variable is measured by the statement: "I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad ." Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the

respondent indeed knows people who can afford to go on holiday multiple times a year and people who cannot afford to, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to holiday inequality”. In the dataset, this variable is named vm20a065.

This variable was answered by 1642 (out of 1645) respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.13 (SD=1.368), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford to go on holiday multiple times a year and people who cannot afford to.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.

Exposure to housing inequality

* the four separate variables of Exposure to inequality

DATASET ACTIVATE DataSet2.

FREQUENCIES VARIABLES=exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality exposure_to_financial_inequality

/STATISTICS=STDDEV MEAN

/ORDER=ANALYSIS.

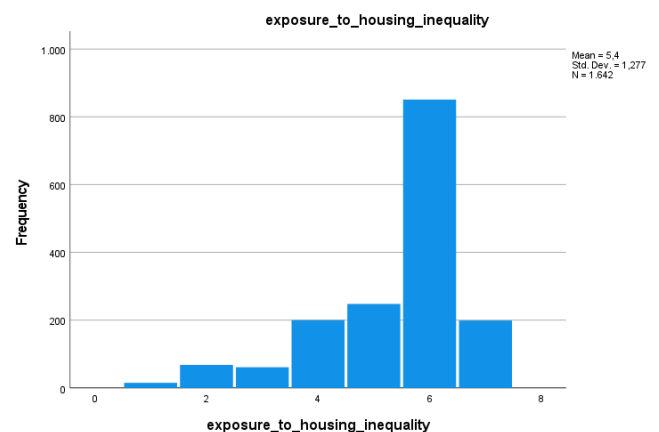
I know people who own large houses and people who live in small rental apartments.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	,9	,9	,9
	2	68	4,1	4,1	5,1
	3	61	3,7	3,7	8,8
	4	200	12,2	12,2	21,0
	5	248	15,1	15,1	36,1
	6	851	51,7	51,8	87,9

	7	199	12,1	12,1	100,0
	Total	1642	99,8	100,0	
Missing	System	3	,2		
Total		1645	100,0		

The second part of the first explanatory variable is measured by the statement: “I know people who own large houses and people who live in small rental apartments.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who own large houses and people who live in rental housing, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to housing inequality”. In the dataset, this variable is named vm20a066.

This variable was answered by 1642 (out of 1645) respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.40 (SD=1.277), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who own large houses and people who live in small rental apartments.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.

Exposure to educational inequality

* the four separate variables of Exposure to inequality

DATASET ACTIVATE DataSet2.

FREQUENCIES VARIABLES=exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality exposure_to_financial_inequality

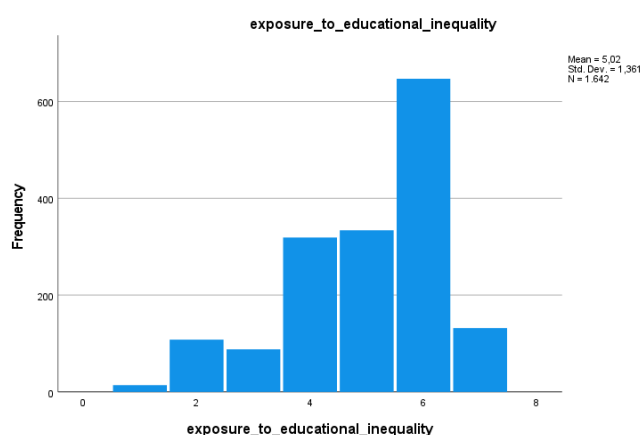
/STATISTICS=STDDEV MEAN

/ORDER=ANALYSIS.

I know people who can afford a good education for themselves or their children and people who cannot.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	,9	,9	,9
	2	108	6,6	6,6	7,4
	3	88	5,3	5,4	12,8
	4	319	19,4	19,4	32,2
	5	334	20,3	20,3	52,6
	6	647	39,3	39,4	92,0
	7	132	8,0	8,0	100,0
	Total	1642	99,8	100,0	
Missing	System	3	,2		
Total		1645	100,0		

The third part of the first explanatory variable is measured by the statement: “I know people who can afford a good education for themselves or their children and people who cannot.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford a good education for themselves or their children and people who cannot afford to, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to educational inequality”. In the dataset, this variable is named vm20a067.



This variable was answered by 1642 (out of 1645) respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.02 (SD=1.361), which is reasonably centred but slightly on the

higher side. Most respondents selected score 6, indicating that they know both people who can afford a good education for themselves or their children and people who cannot afford to.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.

Exposure to financial inequality

* the four separate variables of Exposure to inequality

DATASET ACTIVATE DataSet2.

FREQUENCIES VARIABLES=exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality exposure_to_financial_inequality

/STATISTICS=STDDEV MEAN

/ORDER=ANALYSIS.

I know people who can afford to save or invest money each month and people who don't make ends meet.

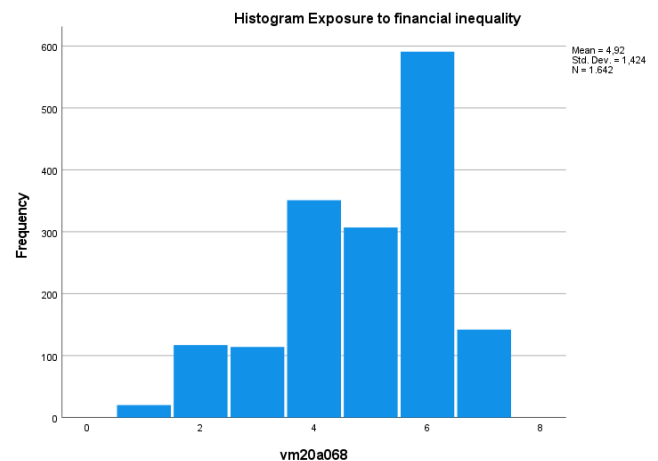
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	1,2	1,2	1,2
	2	117	7,1	7,1	8,3
	3	114	6,9	6,9	15,3
	4	351	21,3	21,4	36,7
	5	307	18,7	18,7	55,4
	6	591	35,9	36,0	91,4
	7	142	8,6	8,6	100,0
	Total	1642	99,8	100,0	
Missing	System	3	,2		
Total		1645	100,0		

The fourth part of the first explanatory variable is measured by the statement: "I know people who can afford to save or invest money each month and people who don't make ends meet." Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor

disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford to save or invest money each month and people who don't make ends meet, meaning lower homogeneity. This explanatory variable is abbreviated as "Exposure to financial inequality". In the dataset, this variable is named vm20a068.

This variable was answered by 1642 (out of 1645) respondents. The question has a range of 6 (1-7), and the mean of this variable is 4.92 (SD=1.424), which is reasonably centred. Most respondents selected score 6, indicating that they know both people who can afford to save or invest money each month and people who don't make ends meet.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.



Social ladder placement (V2)

*frequency tables for all my variables

FREQUENCIES VARIABLES=friendship_educational_homogeneity
workplace_educational_homogeneity

exposure_to_inequality wealth_inequality_perception social_ladder_placement

/STATISTICS=STDDEV SEMEAN MEAN

/BARCHART FREQ

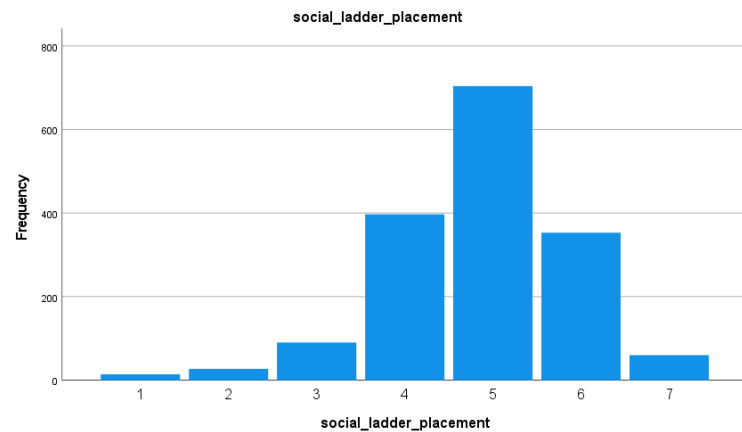
/ORDER=ANALYSIS.

Where would you put yourself on the ladder?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	,9	,9	,9
	2	27	1,6	1,6	2,5
	3	90	5,5	5,5	8,0
	4	397	24,1	24,1	32,1
	5	704	42,8	42,8	74,9

6	353	21,5	21,5	96,4
7	60	3,6	3,6	100,0
Total	1645	100,0	100,0	

The third explanatory variable is measured by the question: “Where would you put yourself on the ladder?” In our society, some groups tend to be towards the top (7), while others tend to be towards the bottom (1) of the social ladder. Respondents could answer with (1) Low, (2), (3), (4), (5), (6), and (7) High. A high score indicates that a respondent places themselves high on the social ladder. This explanatory variable is abbreviated as “Social ladder placement” (V3). In the dataset, this variable is named vm20a029.



This variable was answered by all 1645 respondents. The question has a range of 6 (1-7), and the mean of this variable is 4.85 (SD=1.041), which is reasonably centred. Most respondents selected score 5, indicating they place themselves at a moderately high position on the social ladder.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Wealth inequality perception (DV)

*frequency tables for all my variables

FREQUENCIES VARIABLES=friendship_educational_homogeneity
workplace_educational_homogeneity

exposure_to_inequality wealth_inequality_perception social_ladder_placement

/STATISTICS=STDDEV SEMEAN MEAN

/BARCHART FREQ

/ORDER=ANALYSIS.

To what extent do you agree or disagree with the following statement? Differences in wealth in the Netherlands are too large.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	17	1,0	1,0	1,0
	2	100	6,1	6,1	7,1
	3	90	5,5	5,5	12,6
	4	225	13,7	13,7	26,4
	5	381	23,2	23,2	49,6
	6	579	35,2	35,3	84,9
	7	247	15,0	15,1	100,0
	Total	1639	99,6	100,0	
Missing	System	6	,4		
Total		1645	100,0		

The dependent variable is measured by the statement: “To what extent do you agree or disagree with the following statement? Differences in wealth in the Netherlands are too large.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent perceives wealth inequality as high. The dependent variable is abbreviated as “Wealth inequality perception” (DV). In the dataset, this variable is named vm20a074.

This variable was answered by 1639 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.18 (SD=1.413), which is centred a bit to the right. Most respondents selected score 6, indicating they agree that wealth inequality is high.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are hardly any missing values. The variable appears to be valid.



Edits of variables

*Exposure to inequality in one variable

COMPUTE homogeneity=mean(vm20a065, vm20a066, vm20a067, vm20a068).

EXECUTE.

The variable used for exposure to inequality is a combination of four different variables that will be merged together to create a broader picture of exposure to wealth inequality. All four questions focus on the same theme: whether the respondent knows both wealthy and poor people in terms of vacations, housing size, the ability to afford good education for themselves and their children, and the possibility of saving money. All four variables share the same scale and have the same underlying meaning. The overarching name is "Exposure to inequality".

*reliability of Chronbachs alfa for the variable Exposure to inequality:

RELIABILITY

/VARIABLES=exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality exposure_to_financial_inequality

/SCALE('ALL VARIABLES') ALL

/MODEL=ALPHA

/STATISTICS=CORR

/SUMMARY=TOTAL.

Here is the Chronbach's alpha for the variable above (Exposure to inequality). The Chronbachs alpha is high (>0.8).

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,835	,834	4

*recoding the experimental conditons into two seperate ones

RECODE vm20a002 (1=0) (2=1) (3=0) INTO stimulus_dummy1.

RECODE vm20a002 (1=0) (2=0) (3=1) INTO stimulus_dummy2.

EXECUTE.

Experimental condition group 1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	1096	66,6	66,6	66,6
	1,00	549	33,4	33,4	100,0
	Total	1645	100,0	100,0	

Experimental condition group 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	1097	66,7	66,7	66,7
	1,00	548	33,3	33,3	100,0
	Total	1645	100,0	100,0	

As part of the research design, participants were split into three different experimental conditions. One group saw information on the distribution of wealth, another group saw ethnic discrimination, and the third group saw sport (control condition) in the Netherlands. The question about wealth inequality perception (DV) was collected from participants after they saw the experiment stimuli, so that means the experimental condition group on the distribution of wealth has to be taken into account. This experimental condition group is highly likely to impact the outcomes of the responses, as it can significantly influence how respondents answer compared to the control condition group. The respondents might have responded differently if they were not part of this experimental group. Therefore, it is essential to control for this experiment group.

*variable of homogeneity (in friendship) recoded to the opposite values

DATASET ACTIVATE DataSet1.

COMPUTE friendship_ehr=8 - friendship_educational_homogeneity.

EXECUTE.

*variable of homogeneity (in workplace) recoded to the opposite values

```
DATASET ACTIVATE DataSet1.
```

```
RECODE workplace_educational_homogeneity (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1) (9=9) INTO  
workplace_ehr.
```

```
VARIABLE LABELS workplace_ehr 'workplace_ehr'.
```

```
EXECUTE.
```

For two variables, the scale is made the opposite of the original question. Instead of a high score indicating high homogeneity, a high score now signifies low homogeneity, in line with the other variables. This adjustment has been made for both Friendship Educational Homogeneity (IV1) and Workplace Educational Homogeneity (IV2).

*taking the missing data out of the dataset:

```
DATASET ACTIVATE DataSet1.
```

```
COMPUTE Misval=MISSING(friendship_ehr) + MISSING(workplace_ehr) +  
MISSING(exposure_to_inequality) +  
MISSING(social_ladder_placement) + MISSING(wealth_inequality_perception)  
+MISSING(stimulus_dummy1)  
+ MISSING(stimulus_dummy2).
```

```
EXECUTE.
```

```
COMPUTE filter_$=Misval = 0.
```

```
EXECUTE.
```

```
USE ALL.
```

```
COMPUTE filter_$=(filter_$ = 1).
```

```
VARIABLE LABELS filter_$ 'filter_$ = 1 (FILTER)'.
```

```
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
```

FORMATS filter_\$ (f1.0).

FILTER BY filter_\$.

EXECUTE.

A total of 40 missing respondents were removed from the 1,645, leaving 1,605. This is still a large number, so it is to be expected that the analyses will not differ much from the previous ones.

*looking at residuals with PP plot and histogram whether the assumptions of linear regression are violated (they are):

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT wealth_inequality_perception

/METHOD=ENTER friendship_ehr

/METHOD=ENTER workplace_ehr

/METHOD=ENTER exposure_to_inequality

/METHOD=ENTER social_ladder_placement

/SCATTERPLOT=(*ZRESID ,*ZPRED)

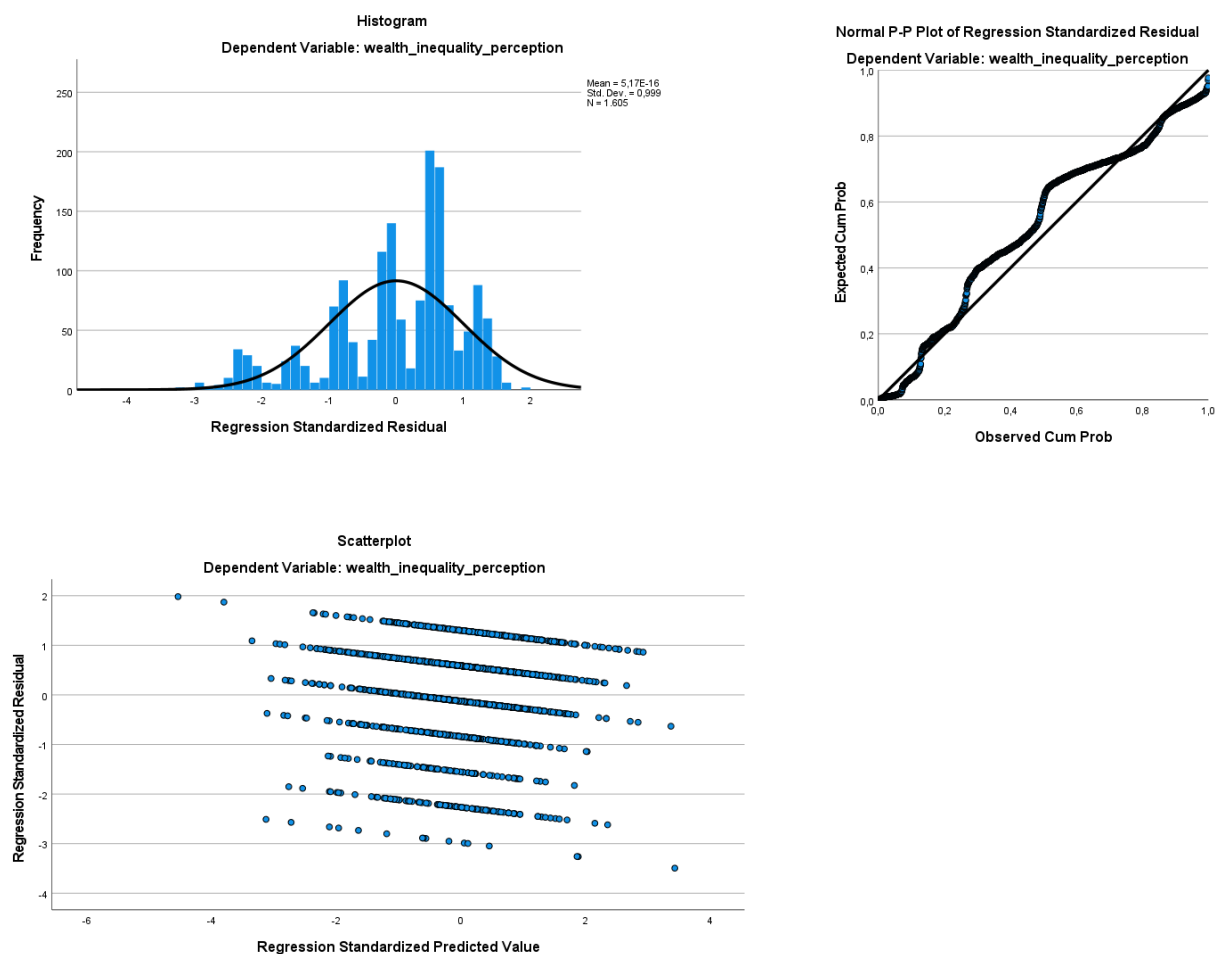
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4,22	5,90	5,17	,210	1605
Std. Predicted Value	-4,532	3,437	,000	1,000	1605
Standard Error of Predicted Value	,037	,201	,075	,022	1605

Adjusted Predicted Value	4,16	5,95	5,17	,211	1605
Residual	-4,898	2,779	,000	1,400	1605
Std. Residual	-3,494	1,983	,000	,999	1605
Stud. Residual	-3,511	2,003	,000	1,001	1605
Deleted Residual	-4,947	2,838	,000	1,405	1605
Stud. Deleted Residual	-3,524	2,005	,000	1,001	1605
Mahal. Distance	,097	31,965	3,998	3,227	1605
Cook's Distance	,000	,025	,001	,002	1605
Centered Leverage Value	,000	,020	,002	,002	1605

a. Dependent Variable: wealth_inequality_perception



Here is the check for the assumptions for what is described above. Due to violations of the assumptions underlying linear regression, logistic regression was conducted instead. The tables

clearly demonstrate that key assumptions—specifically, the normal distribution of residuals and the linearity observed in the P-P plot—were not met. The extent of these violations compromised the validity of the linear regression analysis, rendering further interpretation unreliable. As a result, logistic regression was deemed a more appropriate analytical approach.

*DEPENDENT VARIABLE (Wealth inequality perception) AS LOGISTIC

DATASET ACTIVATE DataSet1.

RECODE wealth_inequality_perception (1 thru 5=0) (6 thru 7=1) INTO wealthinequality_new.

EXECUTE.

When looking at the data and whether the model (of linearity) assumptions are violated, one can see that the assumptions are violated... This makes it nearly impossible to say anything about the data, because whatever comes out, it cannot be said for sure, even if the significance is $p < 0.01$. The original variable has range of 6 ((1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree.) To make that into two values takes a lot of information away, but in the end, this is the better way. More of this is in Attachment 2.

*checking for VIF scores

REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT wealthinequality_new

/METHOD=ENTER friendship_ehr workplace_ehr

/METHOD=ENTER stimulus_dummy1 stimulus_dummy2

/METHOD=ENTER exposure_to_inequality social_ladder_placement.

Excluded Variables^a

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	stimulus_dummy1	-,086 ^b	-3,437	<,001	-,086	,998	1,002	,891
	stimulus_dummy2	-,078 ^b	-3,133	,002	-,078	,998	1,002	,891
	exposure_to_inequality	,105 ^b	4,221	<,001	,105	,990	1,010	,888
	social_ladder_placement	-,067 ^b	-2,657	,008	-,066	,981	1,020	,884
2	exposure_to_inequality	,106 ^c	4,307	<,001	,107	,990	1,010	,746
	social_ladder_placement	-,059 ^c	-2,374	,018	-,059	,978	1,022	,745

a. Dependent Variable: wealthinequality_new

b. Predictors in the Model: (Constant), workplace_ehr, friendship_ehr

c. Predictors in the Model: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1

Final variables

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

Statistics without the missing values and all the other edits made

		friendship_ ehr	workplace_ ehr	exposure_t o_inequalit y	exposure_t o_holiday_i nequality	exposure_t o_housing_ inequality	exposure_t o_educatio nal_inequal ity	exposure_t o_financial _inequality	social_ladd er_placeme nt	wealth_ineq uality_perc eption
N	Valid	1605	1605	1605	1605	1605	1605	1605	1605	1605
	Missi ng	0	0	0	0	0	0	0	0	0
Mean		3,3333	3,4162	5,1136	5,12	5,40	5,02	4,91	4,87	5,17
Std. Deviation		1,49034	1,69861	1,11272	1,371	1,279	1,358	1,423	1,032	1,416
Minimum		1,00	1,00	1,00	1	1	1	1	1	1
Maximum		7,00	7,00	7,00	7	7	7	7	7	7
Percentil es	25	2,0000	2,0000	4,2500	4,00	5,00	4,00	4,00	4,00	4,00
	50	3,0000	3,0000	5,2500	6,00	6,00	5,00	5,00	5,00	6,00
	75	4,0000	5,0000	6,0000	6,00	6,00	6,00	6,00	6,00	6,00

Friendship educational homogeneity (IV1) – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

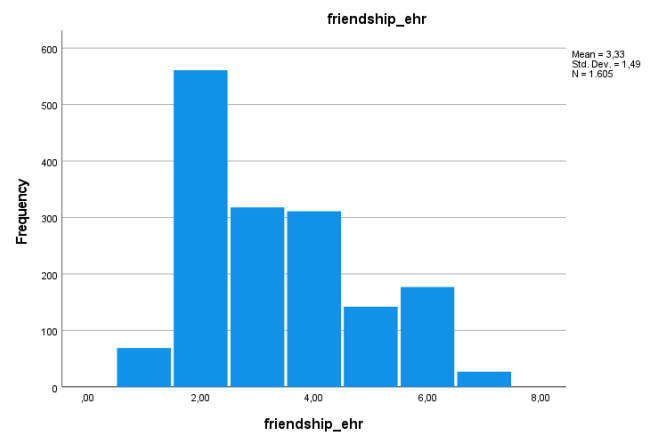
Most of my friends have the same level of education as I have.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	69	4,3	4,3	4,3
	2,00	561	35,0	35,0	39,3
	3,00	318	19,8	19,8	59,1
	4,00	311	19,4	19,4	78,4
	5,00	142	8,8	8,8	87,3
	6,00	177	11,0	11,0	98,3
	7,00	27	1,7	1,7	100,0
	Total	1605	100,0	100,0	

The social situation is measured by the statement: “Most of my friends have the same level of education as I have.” Respondents could answer with (1) Strongly agree, (2) Agree, (3) Somewhat agree, (4) Neither agree nor disagree, (5) Somewhat disagree, (6) Disagree, and (7) Strongly disagree.

For this variable, the scale is made the opposite of the original question. Instead of a high score indicating high homogeneity, a high score now signifies low homogeneity, in line with the other variables. This adjustment has been made for both Friendship Educational Homogeneity (IV1) and Workplace Educational Homogeneity (IV2).

A high score indicates that the respondent has few friends with the same level of education as themselves, meaning lower homogeneity. The social variable is one of the independent variables and is abbreviated as “Friendship educational homogeneity” (IV1). In the dataset, this variable is named vm20a037.



This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 3,33 (SD=1.490), which is reasonably centred. Most respondents selected score 2. Most respondents have friends with the same level of education as themselves.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Workplace educational homogeneity (IV2) – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

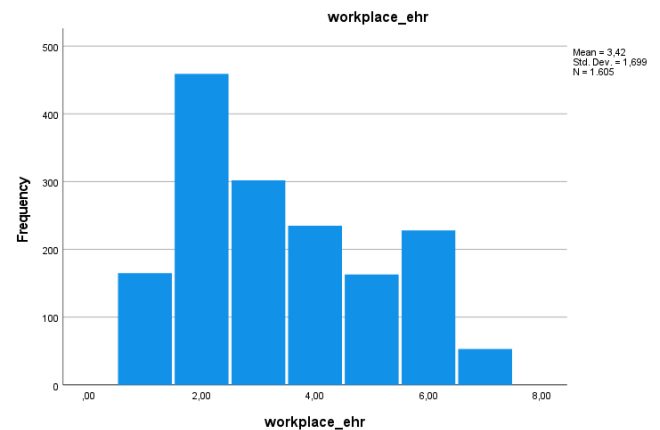
/ORDER=ANALYSIS.

At work, most of my colleagues have/had the same level of education as I have.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	165	10,3	10,3	10,3
	2,00	459	28,6	28,6	38,9
	3,00	302	18,8	18,8	57,7
	4,00	235	14,6	14,6	72,3
	5,00	163	10,2	10,2	82,5
	6,00	228	14,2	14,2	96,7
	7,00	53	3,3	3,3	100,0
	Total	1605	100,0	100,0	

The economic situation is measured by the statement: “At work, most of my colleagues have/had the same level of education as I have.” Respondents could answer with (1) Strongly agree, (2) Agree, (3) Somewhat agree, (4) Neither agree nor disagree, (5) Somewhat disagree, (6) Disagree, and (7) Strongly disagree.

For this variable, the scale is made the opposite of the original question. Instead of a high score indicating high homogeneity, a high score now signifies low homogeneity, in line with the other variables. This adjustment has been made for both Friendship Educational Homogeneity (IV1) and Workplace Educational Homogeneity (IV2).



A high score (except for score 9 which is filtered out because this applies to respondents who never held a job) indicates that the respondent has few colleagues with the same level of education, meaning lower homogeneity. The economic variable is one of the independent variables and is abbreviated as “Workplace educational homogeneity” (IV2). In the dataset, this variable is named vm20a040.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 3,42 (SD=1,70), which is reasonably centred. Most respondents selected score 2. Most respondents have colleagues with the same educational level as themselves, but there are also a considerable number of respondents whose colleagues have different educational backgrounds.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Exposure to inequality (V1) – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

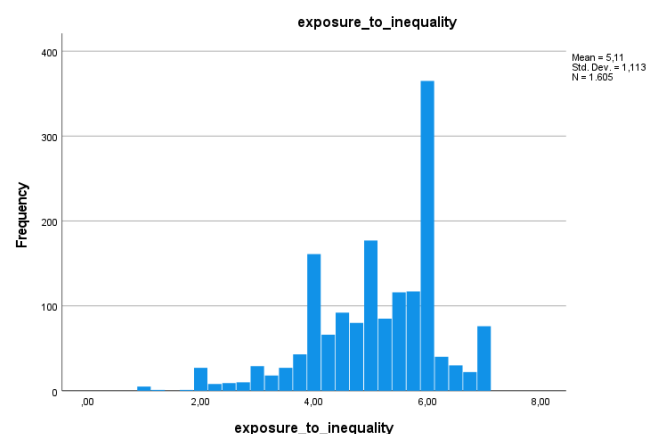
/ORDER=ANALYSIS.

Exposure to inequality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	5	,3	,3	,3
	1,25	1	,1	,1	,4
	1,75	1	,1	,1	,4
	2,00	27	1,7	1,7	2,1
	2,25	8	,5	,5	2,6
	2,50	9	,6	,6	3,2
	2,75	10	,6	,6	3,8
	3,00	29	1,8	1,8	5,6
	3,25	18	1,1	1,1	6,7
	3,50	27	1,7	1,7	8,4
	3,75	43	2,7	2,7	11,1
	4,00	161	10,0	10,0	21,1
	4,25	66	4,1	4,1	25,2
	4,50	92	5,7	5,7	31,0
	4,75	80	5,0	5,0	36,0
	5,00	177	11,0	11,0	47,0
	5,25	85	5,3	5,3	52,3
	5,50	116	7,2	7,2	59,5
	5,75	117	7,3	7,3	66,8
	6,00	365	22,7	22,7	89,5
	6,25	40	2,5	2,5	92,0
	6,50	30	1,9	1,9	93,9
	6,75	22	1,4	1,4	95,3
	7,00	76	4,7	4,7	100,0
	Total	1605	100,0	100,0	

The variable used here will be a combination of four different variables that are merged together to create a broader picture of exposure to wealth inequality. All four questions focus on the same theme: whether the respondent knows both wealthy and poor people in terms of vacations, housing size, the ability to afford good education for themselves and their children, and the possibility of saving money. All four variables share the same scale and have the same underlying meaning. The overarching name is “Exposure to inequality”.

Four questions from the codebook will be merged into one single variable so that the average of the four can be used for a broader picture. All four questions focus on the same theme: whether the respondent knows both wealthy and poor people in terms of vacations, housing size, the ability to afford good education for themselves and their children, and the possibility of saving money. All four questions share the same scale and have the



same underlying meaning. This way, a comprehensive variable can be created where all values are on the same scale. A high score will mean the same for each question—namely, that respondents know many people who are both poorer and wealthier. This approach gives a richer understanding of the differences in exposure to wealth inequality. It makes the data more overarching and provides a broader perspective.

The scale is reliable (Cronbach’s Alpha = 0.836). All items contribute to the scale, so there is no reason to remove any item. The inter-item correlations are strong (ranging from 0.495 to 0.635), indicating that the items measure a coherent construct.

This explanatory variable is measured by the four statements: “I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad”, “I know people who own large houses and people who live in small rental apartments”, “I know people who can afford a good education for themselves or their children and people who cannot”, and “I know people who can afford to save or invest money each month and people who don’t make ends meet.”

Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree.

A high score indicates that the respondent indeed knows people who can afford to go on holiday multiple times a year and people who cannot afford to, meaning lower homogeneity. A high score indicates that the respondent indeed knows people who own large houses and people who live in rental housing, meaning lower homogeneity. A high score indicates that the respondent indeed knows people who can afford a good education for themselves or their children and people who cannot afford to, meaning lower homogeneity. A high score indicates that the respondent indeed knows people who can afford to save or invest money each month and people who don't make ends meet, meaning lower homogeneity. This explanatory variable is abbreviated as "Exposure to inequality". In the dataset, this variable is a combination of vm20a065, vm20a66, vm20a67, and vm20a68.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5,11 (SD=1,11), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford to go on holiday multiple times a year and people who cannot afford to.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid (Cronbach's Alpha = 0.836).

Here are the four variables that were merged into one:

Exposure to holiday inequality – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality
exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

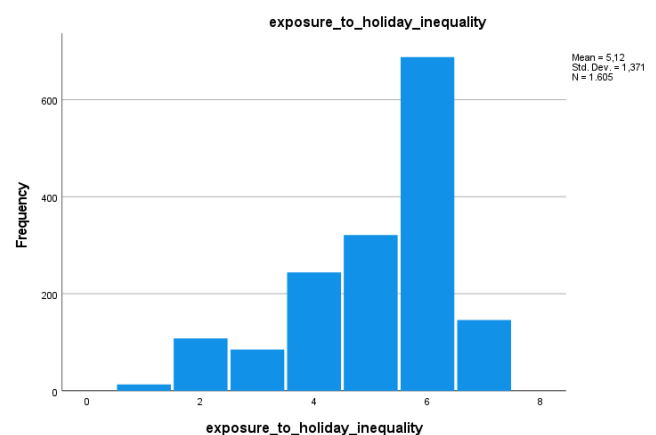
I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	,8	,8	,8
	2	108	6,7	6,7	7,5
	3	85	5,3	5,3	12,8
	4	244	15,2	15,2	28,0
	5	321	20,0	20,0	48,0
	6	688	42,9	42,9	90,9
	7	146	9,1	9,1	100,0
	Total	1605	100,0	100,0	

The first part of the first explanatory variable is measured by the statement: “I know people who go on vacation multiple times a year and people who cannot afford a holiday abroad.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford to go on holiday multiple times a year and people who cannot afford to, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to holiday inequality”. In the dataset, this variable is named vm20a065.

This variable was answered by 1605 respondents.

The question has a range of 6 (1-7), and the mean of this variable is 5.12 (SD=1.3671), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford to go on holiday multiple times a year and people who cannot afford to.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Exposure to housing inequality – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality

exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

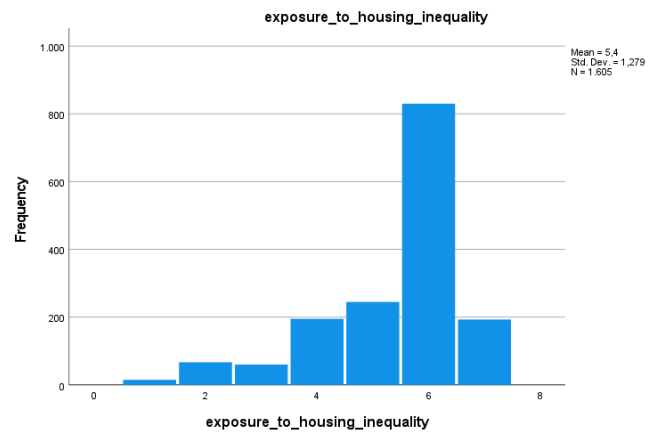
I know people who own large houses and people who live in small rental apartments.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	,9	,9	,9
	2	67	4,2	4,2	5,1
	3	60	3,7	3,7	8,8
	4	195	12,1	12,1	21,0
	5	245	15,3	15,3	36,3
	6	830	51,7	51,7	88,0
	7	193	12,0	12,0	100,0
	Total	1605	100,0	100,0	

The second part of the first explanatory variable is measured by the statement: “I know people who own large houses and people who live in small rental apartments.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who own large houses and people who live in rental housing, meaning lower

homogeneity. This explanatory variable is abbreviated as “Exposure to housing inequality”. In the dataset, this variable is named vm20a066.

This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.40 (SD=1.279), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who own large houses and people who live in small rental apartments.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Exposure to educational inequality – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality
exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

I know people who can afford a good education for themselves or their children and people who cannot.

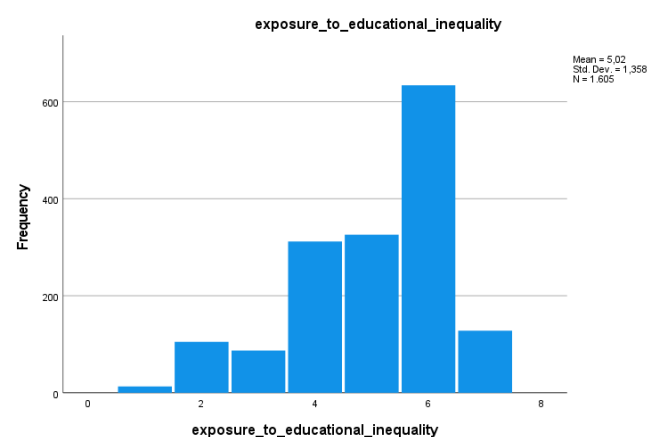
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	,8	,8	,8
	2	105	6,5	6,5	7,4
	3	87	5,4	5,4	12,8
	4	312	19,4	19,4	32,2

5	326	20,3	20,3	52,5
6	634	39,5	39,5	92,0
7	128	8,0	8,0	100,0
Total	1605	100,0	100,0	

The third part of the first explanatory variable is measured by the statement: “I know people who can afford a good education for themselves or their children and people who cannot.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford a good education for themselves or their children and people who cannot afford to, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to educational inequality”. In the dataset, this variable is named vm20a067.

This variable was answered by 1605 respondents.

The question has a range of 6 (1-7), and the mean of this variable is 5.02 (SD=1.358), which is reasonably centred but slightly on the higher side. Most respondents selected score 6, indicating that they know both people who can afford a good education for themselves or their children and people who cannot afford to.



This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.

Exposure to financial inequality – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality
exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

I know people who can afford to save or invest money each month and people who don't make ends meet.

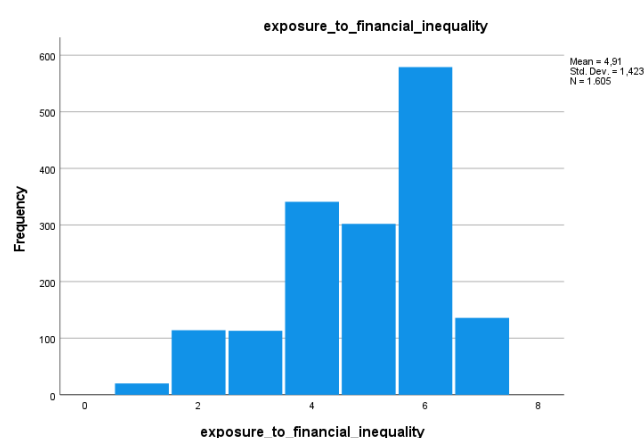
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	1,2	1,2	1,2
	2	114	7,1	7,1	8,3
	3	113	7,0	7,0	15,4
	4	341	21,2	21,2	36,6
	5	302	18,8	18,8	55,5
	6	579	36,1	36,1	91,5
	7	136	8,5	8,5	100,0
	Total	1605	100,0	100,0	

The fourth part of the first explanatory variable is measured by the statement: “I know people who can afford to save or invest money each month and people who don't make ends meet.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent indeed knows people who can afford to save or invest money each month and people who don't make ends meet, meaning lower homogeneity. This explanatory variable is abbreviated as “Exposure to financial inequality”. In the dataset, this variable is named vm20a068.

This variable was answered by 1605 respondents.

The question has a range of 6 (1-7), and the mean of this variable is 4.91 (SD=1.423), which is reasonably centred. Most respondents selected score 6, indicating that they know both people who can afford to save or invest money each month and people who don't make ends meet.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values. The variable appears to be valid.



Social ladder placement (V2) – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality
exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

/ORDER=ANALYSIS.

Where would you put yourself on the ladder?

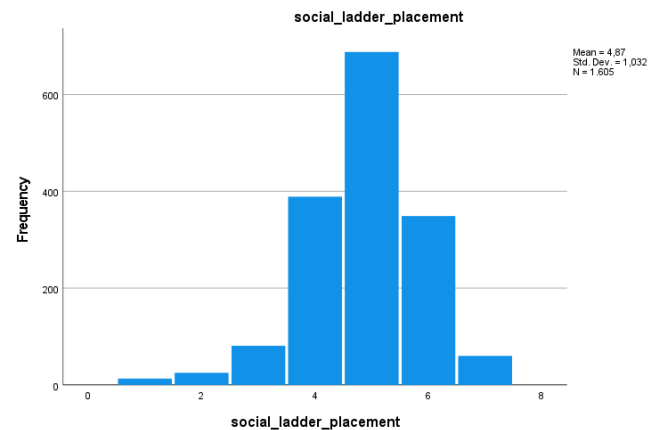
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	,8	,8	,8
	2	25	1,6	1,6	2,4
	3	81	5,0	5,0	7,4
	4	389	24,2	24,2	31,7
	5	688	42,9	42,9	74,5
	6	349	21,7	21,7	96,3
	7	60	3,7	3,7	100,0
	Total	1605	100,0	100,0	

The second explanatory variable is measured by the question: “Where would you put yourself on the ladder?” In our society, some groups tend to be towards the top (7), while others tend to be towards the bottom (1) of the social ladder. Respondents could answer with (1) Low, (2), (3), (4), (5), (6), and (7) High. A high score indicates that a respondent places themselves high on the social ladder. This explanatory variable is abbreviated as “Social ladder placement” (V3). In the dataset, this variable is named vm20a029.

This variable was answered by 1605 respondents.

The question has a range of 6 (1-7), and the mean of this variable is 4.87 (SD=1.03), which is reasonably centred. Most respondents selected score 5, indicating they place themselves at a moderately high position on the social ladder.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no missing values.



Wealth inequality perception (DV) – ordinal

*descriptives of variabels without the missing values and all the other edits made

DATASET ACTIVATE DataSet1.

FREQUENCIES VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality

exposure_to_holiday_inequality exposure_to_housing_inequality
exposure_to_educational_inequality

exposure_to_financial_inequality social_ladder_placement wealth_inequality_perception

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN

/HISTOGRAM

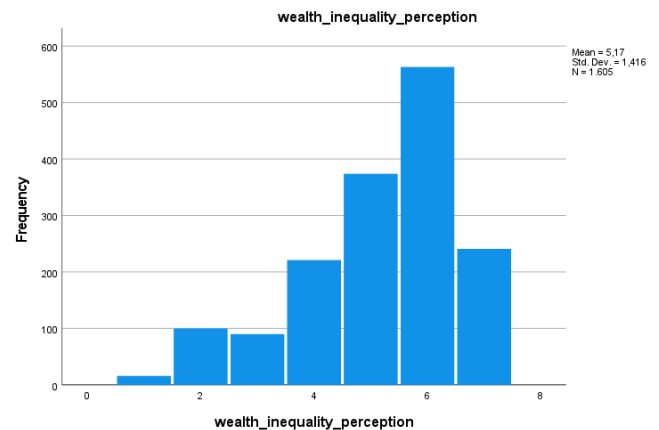
/ORDER=ANALYSIS.

To what extent do you agree or disagree with the following statement? Differences in wealth in the Netherlands are too large.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	1,0	1,0	1,0
	2	100	6,2	6,2	7,2
	3	90	5,6	5,6	12,8
	4	221	13,8	13,8	26,6
	5	374	23,3	23,3	49,9
	6	563	35,1	35,1	85,0

7	241	15,0	15,0	100,0
Total	1605	100,0	100,0	

The dependent variable is measured by the statement: “To what extent do you agree or disagree with the following statement? Differences in wealth in the Netherlands are too large.” Respondents could answer with (1) Strongly disagree, (2) Disagree, (3) Somewhat disagree, (4) Neither agree nor disagree, (5) Somewhat agree, (6) Agree, and (7) Strongly agree. A high score indicates that the respondent perceives wealth inequality as high. The dependent variable is abbreviated as “Wealth inequality perception” (DV). In the dataset, this variable is named vm20a074.



This variable was answered by 1605 respondents. The question has a range of 6 (1-7), and the mean of this variable is 5.17 (SD=1.42), which is centred a bit to the right. Most respondents selected score 6, indicating they agree that wealth inequality is high.

This variable is useful due to the variation in responses and the high number of respondents who answered the question. There are no any missing values. The variable appears to be valid.

Experimental conditions

As part of the research design, participants were split into three different experimental conditions. One group saw information on the distribution of wealth, another group saw ethnic discrimination, and the third group saw sport (control condition) in the Netherlands. The question about wealth inequality perception (DV) was collected from participants after they saw the experiment stimuli, so that means the experimental condition group on the distribution of wealth has to be taken into account. This experimental condition group is highly likely to impact the outcomes of the responses, as it can significantly influence how respondents answer compared to the control condition group. The respondents might have responded differently if they were not part of this experimental group. Therefore, it is essential to control for this experiment group.

Additionally, it is necessary to control for the ethnic discrimination experimental condition group as well. The respondents who were shown this condition might also be affected how they answered

compared to if they had not been in this condition. It might have a smaller difference or effect on the responses and data than the distribution of wealth. Ethnic minorities often face more difficulties than those in the majority (Quillian & Lee, 2023). That is why it is important to control for this experimental group as well.

For the three experimental groups, two dummies have been created. To obtain the dummy variable for these variables and the crosstabs, the following command was entered in SPSS:

*description of frequency table (categoric) experimental conditions

FREQUENCIES VARIABLES=stimulus_dummy1 stimulus_dummy2

/NTILES=4

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE

/BARCHART FREQ

/ORDER=ANALYSIS.

Frequency Table

stimulus_dummy1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	1069	66,6	66,6	66,6
	1,00	536	33,4	33,4	100,0
	Total	1605	100,0	100,0	

stimulus_dummy2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	1067	66,5	66,5	66,5
	1,00	538	33,5	33,5	100,0
	Total	1605	100,0	100,0	

Stimulus_dummy1 → compares the Ethnic discrimination group with the other two groups.

- 0 for Stimulus 1 (Distribution of wealth).
- 1 for Stimulus 2 (Ethnic discrimination).
- 0 for Stimulus 3 (Control: sport and exercise).

Stimulus_dummy2 → compares the control group with the other two groups.

- 0 for Stimulus 1 (Distribution of wealth).
- 0 for Stimulus 2 (Ethnic discrimination).
- 1 for Stimulus 3 (Control: sport and exercise).

If a respondent scores 0, they belong to the group of stimulus 1. If a respondent scores 1, they belong to the group of stimulus 2. In this case, the control group is stimulus 3 (in my study, this is called “dummy 2”).

Attachment 2 – Analysis

Attachment 2 provides an overview of all the analyses made in this study. It includes the correlations with the right N (N = 1605), the analysis of logistic regression (dependent variable Wealth inequality perception), linear regression (dependent variable Exposure to inequality, and Social ladder placement), and probabilities.

Correlations

*correlations of continuous variables without the missing values:

CORRELATIONS

/VARIABLES=friendship_ehr workplace_ehr exposure_to_inequality social_ladder_placement

wealth_inequality_perception stimulus_dummy1 stimulus_dummy2

/PRINT=TWOTAIL NOSIG FULL

/MISSING=PAIRWISE.

Correlations without the missing values (N = 1605)

		friendship_ehr	workplace_ehr	exposure_to_inequality	social_ladder_placement	wealth_inequality_perception	stimulus_dummy1	stimulus_dummy2
friendship_ehr	Pearson Correlation	1	,328**	,088**	-,124**	-,012	-,040	,039
	Sig. (2-tailed)		<,001	<,001	<,001	,633	,105	,121
	N	1605	1605	1605	1605	1605	1605	1605
workplace_ehr	Pearson Correlation	,328**	1	,069**	-,100**	-,012	-,030	,000
	Sig. (2-tailed)	<,001		,005	<,001	,637	,223	,998
	N	1605	1605	1605	1605	1605	1605	1605
exposure_to_inequality	Pearson Correlation	,088**	,069**	1	,021	,116**	,001	,001
	Sig. (2-tailed)	<,001	,005		,403	<,001	,957	,956
	N	1605	1605	1605	1605	1605	1605	1605

social_ladder_placement	Pearson Correlation	-,124**	-,100**	,021	1	-,083**	,022	,028
	Sig. (2-tailed)	<,001	<,001	,403		<,001	,389	,258
	N	1605	1605	1605	1605	1605	1605	1605
wealth_inequality_perception	Pearson Correlation	-,012	-,012	,116**	-,083**	1	-,074**	-,076**
	Sig. (2-tailed)	,633	,637	<,001	<,001		,003	,002
	N	1605	1605	1605	1605	1605	1605	1605
stimulus_dummy1	Pearson Correlation	-,040	-,030	,001	,022	-,074**	1	-,503**
	Sig. (2-tailed)	,105	,223	,957	,389	,003		<,001
	N	1605	1605	1605	1605	1605	1605	1605
stimulus_dummy2	Pearson Correlation	,039	,000	,001	,028	-,076**	-,503**	1
	Sig. (2-tailed)	,121	,998	,956	,258	,002	<,001	
	N	1605	1605	1605	1605	1605	1605	1605

** . Correlation is significant at the 0.01 level (2-tailed).

Logistic regression

* logistic regression (the right way)

LOGISTIC REGRESSION VARIABLES wealthinequality_new

/METHOD=ENTER friendship_ehr workplace_ehr

/METHOD=ENTER stimulus_dummy1 stimulus_dummy2

/METHOD=ENTER exposure_to_inequality social_ladder_placement

/SAVE=LEVER DFBETA DEV

/CLASSPLOT

/PRINT=GOODFIT CI(95)

/CRITERIA=PIN(0.05) POUT(0.10) ITERATE(20) CUT(0.5).

This is the syntax code for the statistical analysis. First, the two independent variables (Friendship educational homogeneity and Workplace educational homogeneity) are entered (in Block 1). Then, the experimental groups are added (experimental condition 1 and Experimental condition 2) — these are the dummy variables (in Block 2). In the final block (Block 3), the two explanatory variables (Exposure to inequality and Social ladder placement) are included. Below, the output for each block is presented:

Block 0:

Classification Table^{a,b}

			Predicted		Percentage Correct
			wealthinequality_new ,00	1,00	
Step 0	wealthinequality_new	,00	0	801	,0
		1,00	0	804	100,0
	Overall Percentage				50,1

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	,004	,050	,006	1	,940	1,004

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	friendship_ehr	,055	1	,815
		workplace_ehr	,132	1	,716

Overall Statistics	,147	2	,929
--------------------	------	---	------

Block 1:

Classification Table^a

				Predicted		Percentage Correct
				wealthinequality_new		
Observed			,00	1,00		
Step 1	wealthinequality_new	,00	384	417	47,9	
		1,00	397	407	50,6	
	Overall Percentage					49,3

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	friendship_e hr	,004	,035	,015	1	,903	1,004	,937	1,077
	workplace_e hr	,009	,031	,092	1	,761	1,009	,950	1,073
	Constant	-,043	,140	,095	1	,759	,958		

a. Variable(s) entered on step 1: friendship_ehr, workplace_ehr.

Block 2:

Classification Table^a

Observed		Predicted		Percentage Correct
		wealthinequality_new ,00	1,00	

Step 1	wealthinequality_new	,00	598	203	74,7
		1,00	476	328	40,8
	Overall Percentage				57,7

a. The cut value is ,500

Variables in the Equation

							95% C.I. for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	
Step 1 ^a	friendship_ehr	,006	,036	,030	1	,862	1,006	,938 1,080
	workplace_ehr	,003	,032	,009	1	,923	1,003	,943 1,067
	stimulus_dummy 1	-,719	,125	33,190	1	<,001	,487	,382 ,622
	stimulus_dummy 2	-,697	,125	31,270	1	<,001	,498	,390 ,636
	Constant	,448	,161	7,779	1	,005	1,566	

a. Variable(s) entered on step 1: stimulus_dummy1, stimulus_dummy2.

Block 3:

Classification Table^a

			Predicted		Percentage Correct
			wealthinequality_new		
Observed			,00	1,00	
Step 1	wealthinequality_new	,00	524	277	65,4
		1,00	389	415	51,6
	Overall Percentage				58,5

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	friendship_ehr	-,013	,037	,136	1	,713	,987	,918	1,060
	workplace_ehr	-,008	,032	,064	1	,800	,992	,932	1,056
	stimulus_dummy1	-,722	,126	32,905	1	<,001	,486	,380	,622
	stimulus_dummy2	-,694	,126	30,496	1	<,001	,500	,390	,639
	exposure_to_inequality	,204	,047	18,989	1	<,001	1,226	1,119	1,344
	social_ladder_placement	-,128	,050	6,454	1	,011	,880	,797	,971
	Constant	,135	,373	,131	1	,717	1,144		

a. Variable(s) entered on step 1: exposure_to_inequality, social_ladder_placement.

Linear regression

*linear regression with Social ladder placement as dependent:

DATASET ACTIVATE DataSet1.

REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT social_ladder_placement

/METHOD=ENTER friendship_ehr workplace_ehr

/METHOD=ENTER stimulus_dummy1 stimulus_dummy2

/METHOD=ENTER exposure_to_inequality.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,139 ^a	,019	,018	1,022	,019	15,735	2	1602	<,001
2	,147 ^b	,022	,019	1,022	,002	1,937	2	1600	,145
3	,151 ^c	,023	,020	1,022	,001	1,951	1	1599	,163

a. Predictors: (Constant), workplace_ehr, friendship_ehr

b. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1

c. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1, exposure_to_inequality

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32,902	2	16,451	15,735	<,001 ^b
	Residual	1674,883	1602	1,045		
	Total	1707,784	1604			
2	Regression	36,947	4	9,237	8,845	<,001 ^c
	Residual	1670,838	1600	1,044		
	Total	1707,784	1604			
3	Regression	38,983	5	7,797	7,470	<,001 ^d
	Residual	1668,802	1599	1,044		
	Total	1707,784	1604			

a. Dependent Variable: social_ladder_placement

b. Predictors: (Constant), workplace_ehr, friendship_ehr

c. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1

d. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1, exposure_to_inequality

Coefficients ^a										
		Unstandardized		Standardize			95,0% Confidence Interval		Collinearity	
		Coefficients		d			for B		Statistics	
				Coefficients			Lower	Upper	Toleranc	
Model		B	Std. Error	Beta	t	Sig.	Bound	Bound	e	VIF
1	(Constant)	5,243	,071		73,396	,000	5,103	5,383		
	friendship_ehr	-,071	,018	-,102	-3,892	<,001	-,106	-,035	,892	1,121
	workplace_ehr	-,040	,016	-,066	-2,538	,011	-,072	-,009	,892	1,121
2	(Constant)	5,172	,081		64,101	,000	5,014	5,330		
	friendship_ehr	-,071	,018	-,103	-3,924	<,001	-,107	-,036	,891	1,123
	workplace_ehr	-,039	,016	-,065	-2,478	,013	-,071	-,008	,891	1,122
	stimulus_dummy1	,092	,063	,042	1,476	,140	-,030	,215	,746	1,340
	stimulus_dummy2	,117	,063	,053	1,867	,062	-,006	,239	,746	1,340
3	(Constant)	5,017	,137		36,546	<,001	4,747	5,286		
	friendship_ehr	-,073	,018	-,105	-4,013	<,001	-,109	-,037	,886	1,128
	workplace_ehr	-,040	,016	-,066	-2,537	,011	-,072	-,009	,890	1,124
	stimulus_dummy1	,092	,063	,042	1,468	,142	-,031	,215	,746	1,340
	stimulus_dummy2	,117	,063	,053	1,866	,062	-,006	,239	,746	1,340
	exposure_to_inequ ality	,032	,023	,035	1,397	,163	-,013	,077	,990	1,010

a. Dependent Variable: social_ladder_placement

*linear regression with Exposure to inequality as dependent:

REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT exposure_to_inequality

/METHOD=ENTER friendship_ehr workplace_ehr

/METHOD=ENTER stimulus_dummy1 stimulus_dummy2

/METHOD=ENTER social_ladder_placement.

```

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,098 ^a	,010	,008	1,10804	,010	7,798	2	1602	<,001
2	,098 ^b	,010	,007	1,10871	,000	,028	2	1600	,972
3	,104 ^c	,011	,008	1,10838	,001	1,951	1	1599	,163

a. Predictors: (Constant), workplace_ehr, friendship_ehr

b. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1

c. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1, social_ladder_placement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19,147	2	9,574	7,798	<,001 ^b
	Residual	1966,846	1602	1,228		
	Total	1985,993	1604			

2	Regression	19,217	4	4,804	3,908	,004 ^c
	Residual	1966,776	1600	1,229		
	Total	1985,993	1604			
3	Regression	21,614	5	4,323	3,519	,004 ^d
	Residual	1964,379	1599	1,229		
	Total	1985,993	1604			

a. Dependent Variable: exposure_to_inequality

b. Predictors: (Constant), workplace_ehr, friendship_ehr

c. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1

d. Predictors: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1, social_ladder_placement

Coefficients^a

Model		Unstandardized		Standardize	t	Sig.	95,0% Confidence Interval		Collinearity	
		Coefficients		d			for B		Statistics	
		B	Std. Error	Beta			Lower	Upper	Toleranc	VIF
							Bound	Bound	e	
1	(Constant)	4,829	,077		62,384	,000	4,677	4,981		
	friendship_ehr	,055	,020	,073	2,790	,005	,016	,093	,892	1,121
	workplace_ehr	,030	,017	,045	1,723	,085	-,004	,064	,892	1,121
2	(Constant)	4,822	,088		55,084	,000	4,650	4,993		
	friendship_ehr	,055	,020	,074	2,792	,005	,016	,094	,891	1,123
	workplace_ehr	,030	,017	,046	1,727	,084	-,004	,064	,891	1,122
	stimulus_dummy1	,016	,068	,007	,231	,817	-,118	,149	,746	1,340
	stimulus_dummy2	,004	,068	,002	,065	,948	-,129	,138	,746	1,340
3	(Constant)	4,626	,165		27,985	<,001	4,302	4,950		

friendship_ehr	,058	,020	,077	2,915	,004	,019	,096	,882	1,134
workplace_ehr	,031	,017	,048	1,811	,070	-,003	,065	,888	1,126
stimulus_dummy1	,012	,068	,005	,179	,858	-,121	,145	,745	1,342
stimulus_dummy2	-1,253E-5	,068	,000	,000	1,000	-,133	,133	,745	1,343
social_ladder_placement	,038	,027	,035	1,397	,163	-,015	,091	,978	1,022

a. Dependent Variable: exposure_to_inequality

Probabilities Exposure to inequality and Social ladder placement

Here are the probabilities for the explanatory variables (Exposure to inequality and Social ladder placement). Because the independent variables do not have an effect, they are not included in the probabilities. These independent variables have the value 3, so that they remain constant.

Table 6: Probabilities of the variables Exposure to inequality, the experimental conditions, and Social ladder placement having Wealth inequality perception as dependent variable. (Made in Excel).

experiment 1 (0)		experiment 2 (0)	
exposure to in.	low	0,524	0,524
(The rest 3)	high	0,713	0,713
experiment 1 (1)		experiment 2 (0)	
exposure to in.	low	0,348	0,348
(The rest 3)	high	0,547	0,547
experiment 1 (0)		experiment 2 (1)	
exposure to in.	low	0,355	0,355
(The rest 3)	high	0,554	0,554
social ladder Low		social ladder High	
exposure to in.	low	0,556	0,428
(experiment 1 (0)	high	0,739	0,629
experiment 2 (0))			
social ladder Low		social ladder High	
exposure to in.	low	0,378	0,267

(experiment 1 (1)	high	0,579	0,452
experiment 2 (0))			

		social ladder Low	social ladder High
exposure to in.	low	0,385	0,272
(experiment 1 (0)	high	0,587	0,459
experiment 2 (1))			

Attachment 3 – Assumptions logistic regression

Attachment 3 provides an overview of all the assumptions of the analyses made in this study. It includes the syntax and output of the assumptions of logistic regression. It also includes the VIF scores of linear regression to check for multicollinearity.

Syntax and output

The logistic regression analysis provides three models that are incrementally expanded. Model 1 includes only the independent variables (friendship and workplace homogeneity), Model 2 adds the experimental conditions, and Model 3 includes the explanatory variables.

* logistic regression (the right way):

```
LOGISTIC REGRESSION VARIABLES wealthinequality_new  
  
/METHOD=ENTER friendship_ehr workplace_ehr  
  
/METHOD=ENTER stimulus_dummy1 stimulus_dummy2  
  
/METHOD=ENTER exposure_to_inequality social_ladder_placement  
  
/SAVE=LEVER DFBETA DEV  
  
/CLASSPLOT  
  
/PRINT=GOODFIT CI(95)  
  
/CRITERIA=PIN(0.05) POUT(0.10) ITERATE(20) CUT(0.5).
```

Block 1:

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	,147	2	,929
	Block	,147	2	,929
	Model	,147	2	,929

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2224,850 ^a	,000	,000

a. Estimation terminated at iteration number 2 because parameter estimates changed by less than ,001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	12,972	8	,113

Contingency Table for Hosmer and Lemeshow Test

		wealthinequality_new = ,00		wealthinequality_new = 1,00		Total
		Observed	Expected	Observed	Expected	
Step 1	1	82	82,966	82	81,034	164
	2	109	113,367	116	111,633	225
	3	77	85,899	94	85,101	171
	4	71	70,679	70	70,321	141
	5	98	87,974	78	88,026	176
	6	74	73,758	74	74,242	148
	7	86	80,484	76	81,516	162
	8	77	72,742	70	74,258	147
	9	87	80,283	76	82,717	163
	10	40	52,848	68	55,152	108

Block 2:**Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	43,532	2	<,001
	Block	43,532	2	<,001
	Model	43,680	4	<,001

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2181,317 ^a	,027	,036

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than ,001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	7,949	8	,438

Contingency Table for Hosmer and Lemeshow Test

		wealthinequality_new = ,00		wealthinequality_new = 1,00		Total
		Observed	Expected	Observed	Expected	
Step 1	1	87	91,737	76	71,263	163
	2	91	90,785	71	71,215	162
	3	87	86,523	68	68,477	155
	4	104	91,294	60	72,706	164
	5	82	87,672	76	70,328	158
	6	91	89,580	71	72,420	162

7	68	74,713	79	72,287	147
8	60	60,042	96	95,958	156
9	57	60,824	102	98,176	159
10	74	67,831	105	111,169	179

Block 3:

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	25,034	2	<,001
	Block	25,034	2	<,001
	Model	68,713	6	<,001

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2156,284 ^a	,042	,056

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than ,001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	10,776	8	,215

Contingency Table for Hosmer and Lemeshow Test

		wealthinequality_new = ,00		wealthinequality_new = 1,00		Total
		Observed	Expected	Observed	Expected	
Step 1	1	97	105,616	64	55,384	161
	2	93	97,022	68	63,978	161

3	107	92,456	54	68,544	161
4	86	88,524	75	72,476	161
5	89	84,916	72	76,084	161
6	82	81,628	80	80,372	162
7	78	75,930	83	85,070	161
8	65	67,103	96	93,897	161
9	63	59,167	98	101,833	161
10	41	48,639	114	106,361	155

*checking for VIF scores

REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT wealthinequality_new

/METHOD=ENTER friendship_ehr workplace_ehr

/METHOD=ENTER stimulus_dummy1 stimulus_dummy2

/METHOD=ENTER exposure_to_inequality social_ladder_placement.

Excluded Variables^a

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	stimulus_dummy1	-,086 ^b	-3,437	<,001	-,086	,998	1,002	,891

	stimulus_dummy2	-,078 ^b	-3,133	,002	-,078	,998	1,002	,891
	exposure_to_inequality	,105 ^b	4,221	<,001	,105	,990	1,010	,888
	social_ladder_placement	-,067 ^b	-2,657	,008	-,066	,981	1,020	,884
2	exposure_to_inequality	,106 ^c	4,307	<,001	,107	,990	1,010	,746
	social_ladder_placement	-,059 ^c	-2,374	,018	-,059	,978	1,022	,745

a. Dependent Variable: wealthinequality_new

b. Predictors in the Model: (Constant), workplace_ehr, friendship_ehr

c. Predictors in the Model: (Constant), workplace_ehr, friendship_ehr, stimulus_dummy2, stimulus_dummy1

These is the syntax used in this research to determine the outliers and assumptions of logistic regression.

-2 Log Likelihood (-2LL) and chi-square test

A key measure for model fit in logistic regression is the -2 Log Likelihood (-2LL). As shown in Table 3 (and in the output of Attachment 3), model fit improves with each step:

- Model 1: -2LL = 2224.85
- Model 2: -2LL = 2181.32
- Model 3: -2LL = 2156.28

This decreasing trend indicates that each added block (experimental conditions, exposure, and ladder position) improves the model's explanatory power for perceptions of wealth inequality. Chi-square tests show that both Model 2 and Model 3 significantly improve on the baseline model ($p < .001$), suggesting that structural and subjective variables contribute more than network factors alone.

Hosmer-Lemeshow test

The Hosmer-Lemeshow test assesses the fit between the model and the observed data. In all three models, this test is not significant ($p > .05$), implying that the models fit the observed data well. This is important because it shows that the probability distributions in the model adequately align with the empirical reality of the respondents.

This test checks whether the model fits the data well — that is, whether the observed values match the expected values. A non-significant result indicates not a bad fit.

- Model 1: $p = 0.929 \rightarrow$ not a bad fit.
- Model 2: $p = 0.438 \rightarrow$ not a bad fit.
- Model 3: $p = 0.215 \rightarrow$ not a bad fit.

Multicollinearities (linear): VIF

A key consideration in regression analysis is the degree of overlap between independent variables, or multicollinearity. This is tested using the Variance Inflation Factor (VIF). In these models, the VIF values range from 1.0 to 1.3, indicating that there is no problematic overlap between variables. This means that the predictors are sufficiently independent of each other to provide reliable estimates. For instance, despite the positive correlation between Friendship and Workplace homogeneity ($r = .328^{**}$), they do not overshadow each other in the model.

The VIF values are all around 1.0 to 1.3, which indicates no signs of multicollinearity. This means the assumption of independent predictors is not violated.

Leverage

Additionally, outliers and cases with disproportionate influence on the model (leverage and DFBeta) were checked. While there are some observations with high leverage, the values remain below the critical threshold, and there are no outliers in DFBeta. This indicates that the model outcomes are robust, and no individual respondent distorts the overall regression relationships.

Rule: $3p/N$, where p is the number of parameters including the constant.

$$3 * 7 / 1605 = 21 / 1605 = 0.013$$

LEV_2
,02098
,01699
,01645
,01594
,01514
,01418
,01409
,01409
,01400

Do certain cases have disproportionate influence on the model? There are 9 cases that exceed this threshold. The highest leverage value is 0.021 — above the cutoff, but not extremely high.

These 9 cases have above-average influence on the model, but not to an extreme degree. Therefore, there is no reason to exclude them.

DFBeta

Rule: $3 / \sqrt{N}$. Any values above this threshold are potential outliers.

$$3 / \sqrt{1605} = 0.0749$$

Do certain cases have disproportionate influence on the model?

Across all seven tables, not a single value exceeds this threshold.

DFB0_2	DFB1_2	DFB2_2	DFB3_2	DFB4_2	DFB5_2	DFB6_2
,05232	,00454	,00280	,00655	,00662	,00334	,00749
,05005	,00402	,00265	,00615	,00628	,00307	,00665
,04037	,00344	,00250	,00609	,00611	,00302	,00635
,03567	,00295	,00237	,00600	,00609	,00296	,00612
,03104	,00283	,00236	,00598	,00606	,00290	,00544
,03045	,00271	,00222	,00593	,00597	,00288	,00544
,03034	,00261	,00221	,00593	,00588	,00284	,00529
,03006	,00259	,00200	,00590	,00584	,00278	,00516
,02861	,00248	,00199	,00590	,00584	,00272	,00513

In none of the DFBeta tables (for all predictors) does any observation exceed this threshold. The largest value is 0.0523, which is below the threshold. No data point has a disproportionate influence on a specific b-coefficient. This means that the model is stable: it is not dominated by individual observations.

Theoretically, it is notable that the base model (Model 1) has limited predictive power — consistent with the earlier point that educational homogeneity in friendship and work alone is not strong enough to explain perceptions of inequality. It is only when structural exposure to inequality (Model 3) and subjective position are added that a meaningful explanatory model emerges. This confirms the assertion in the theoretical framework that the perception of inequality is not just a product of social networks, but also arises from broader economic experience and personal identification.