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Explanations for the sources of wealth: It is not a just world

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#### **Author Contribution**

J.K.A: Analysis; writing

A.F: Visualisation, Writing -review

C.R: Data curation; analysis

**Abstract** 

Five hundred participants indicated the extent to which they thought very wealthy people had become rich from four routes: three by personal effort (executive, investor, entrepreneur) and one by inheritance. These ratings were correlated with their demography (sex, age), ideology (religious and political beliefs), self-ratings, intelligence (IQ) as well as their Beliefs in a Just World (BJW) and their endorsement of Conspiracy Theories. It appears that most people are aware of the importance that agentic sources of wealth play, favouring entrepreneurship as the main pathway to extreme wealth. However, BJW seems to come in two versions: A "bright side version" indicating a belief that hard work and persistence will prevail, and another pathway linking agentic outcomes to theories of conspiracy. Intelligence appears to play an important role in this, but closer scrutiny suggests that IQ mainly serves to moderate conspiracy beliefs. Consequences for conspiracy beliefs and social unrest are discussed.

#### Introduction

The distribution of wealth has come under increasing scrutiny as a main driver of social unrest and political upheaval in many Western political think tanks such as the World Economic Forum Global Risks Report (2016) as well as in applied and in academic research (e.g., Piketty, 2014; Lee, Shin, & Shin, 2013; Evans, Allan & Cantle, 2017). While there exist a number of attempts at indexing and computing the correspondence between economic distribution and unrest, there also seem to be wide national, cultural, and temporal factors determining this relationship (Casas i Klett & Cozzi, 2021; Jetten & al., 2021; Murshed, Badiuzzaman & Hasan, 2018). Clearly, the information about the economic distribution of wealth is filtered through people's perceptions and tacit assumptions about the underlying mechanisms before giving rise to protests or other social reactions.

Research on people's understanding of economic and social statistics has consistently shown that people are not accurately informed about their societies (Rosling, Rosling & Rönnlund, 2019). Moreover, their inaccuracy is not random but skewed towards biases that are motivated by political, demographic and social psychological contexts (Furnham, Arnulf & Robinson 2021). Some of this research indicates that factors related to education and information access will ease tensions because people can understand how elites in their societies are constituted. This may allow people to participate in wealth creation or understand why they are apparently barred from doing so, potentially driving growth mechanisms and easing economically induced frustrations (Casas i Klett & Cozzi, 2021; Mathisen & Arnulf, 2013). On the other hand, a propensity for biased thinking may lend itself to conspiracy theories that propagate easily with high potential for social unrest, but that may do little to ameliorate the underlying causes themselves (Kofta, Soral & Bilewicz, 2020; Rakopoulos, 2018).

While others have previously explored similar topics from the perspective of social identity theory (Jetten & al., 2021), we want to explore the cognitive underpinnings of how the pathway to wealth is understood and construed by the public, as called for in a recent review of celebrity worship (Brooks, 2021). Therefore, the purpose of the present article is to explore how people's attributions of causes for extreme wealth are linked to four psychological characteristics with relevance for social psychological engagement: Information processing capabilities (IQ), beliefs in a just world, assumptions of self-entitlement and importance and tendency to believe in conspiracy theories. The rationale for selecting these variables is that people may vary on a few key dimensions in their interpretations of extreme wealth:

First of all, do they tacitly expect the world to be just place or are they more inclined to perceive the dynamics of the world as independent of their own ethical views? This is in itself no reason for disgruntlement or social unrest, but a second dimension may add important information: Do people expect differences as indications of an "unjust world", or do they interpret differences as a sign that ominous forces are at work? Finally, will their ability to extract information and understand their economic surroundings give them freedom to develop more actionable models of society? In short: Is the perceived great wealth of some individuals in their society a product of what people do, or rather than outcomes of fate and fortune (like personal inheritance) or products of nefarious subgroups?

In what follows, we will argue that the interaction of these four characteristics will influence people's interpretations of the causal pathways for extreme wealth. While our study is just an exploration of these factors, we suggest that such studies may shed light on people's propensities for social acts when perceptions of skewed distributions incite social unrest.

### **Theory**

All societies have elites that serve as gatekeepers of value and wealth creation. These elites can be seen as beneficial (creating value making the pie bigger for everyone) or as extracting value, as in rent-seeking, zero-sum games to no benefit of others (Casas i Klett & Cozzi, 2021). It is itself a research task to identify and understand these elites, but the very rich stand out as both part of, as well as beneficiaries of these elites. The very rich can be targets both of admiration (Elster, 2018) and iconoclastic rage (Rakopoulos, 2018). We are interested in the question: "How do people in the surrounding society perceive and make sense of the very rich elites?"

Even research on how people become (very) rich, and on how the rich are different from the poor may elicit empirical studies and controversies? (Andreoni et al., 2017; Leckelt et al., 2018; Liu et al., 2017; Woods et al., 2005). Are they admirable or despicable (Horwitz & Dovidio, 2017)? Further, what are the real sources of wealth in our society? Depending on cultural, economic and political contexts, the rich can be portrayed as intelligent and hard-working but also greedy and less honest, and differences in such opinions are integrated with personal political views (Pew Research Center 2012).

The Times (of London) publishes an annual Rich List where they found most billionaires are "self-made" making their fortunes through the creation of business empires, a fact corroborated by the Global Elite Quality Index of 2022 (Casas & Cozzi, 2022). The proportion of self-made

billionaires in various nations is however an expression of various factors and subject to complex interpretations. There are several factors affecting the number of self-made billionaires. The mere number of billionaires in a society may also be subject to further analysis in terms of causes and beneficiaries. The global "Elite Quality Index" (Casas & Cozzi, 2021; Casas & Cozzi, 2022) differs between total numbers of billionaires, self-made billionaires and proportion of women billionaires in the economy to weight measures of mobility and opportunities with rent-seeking from old elites. As shown by social identity theory, the public will be interested in information that allow comparisons between groups of people to gain impressions of equity.

Poor countries may have few billionaires, but newly reformed countries like China or Eastern European nations have many because the economic reforms have had spectacular or uneven effects (Casas & Cozzi, 2022). In some countries (Germany, Switzerland or Portugal) however, super-rich individuals are far more likely to be born into wealth. In the United Kingdom and the United States most wealthy individuals make their money without familial assistance. In Russia, where oil has produced countless billionaires since the collapse of communism, inheritance is even rarer with only 1.3 percent of rich individuals born into wealth. However still people inherit great fortunes.

In this regard, information about, and explanations for poverty seem more accessible, compared to information on origins of wealth (Bobbio et al., 2010; Furnham, 1982; Marquis & Rosset 2021), even if some previous studies focused on lay explanation for wealth (Forgas et al., 1982; Furnham, 1983; Furnham & Bond, 1986) as well as studies that looked at both (Hunt et al., 2004; Smith & Stone, 1989).

The early research suggested three types of explanations, namely *individual*, *societal* and *fatalistic*, though various other distinctions have been made (Marquis & Rosset, 2021). That is, people become rich and poor due to their own efforts of lack of them; the particular society (and time) in which they live; or uncontrollable, random market and economic forces, or luck and chance.

A good deal of research has been concerned with examining the correlates of individuals' *preference* for a particular type of explanation. The present study is a development of this tradition, where our focus is on perceptions and cognitive constructions of how people become very rich.

Sussman et al. (2014) reviewed historical and empirical evidence on extremely wealthy individuals and their sources of wealth. They suggested there were essentially four ways individuals can acquire great wealth: the *Executive* who ascended in large, powerful and rich organisations to very well-paid jobs; the *Financial Trader* whose skill or good fortune meant their investing and trading brought them great wealth; the *Entrepreneur* whose inventions or innovations lead to massive financial gains; and the *Heir* who inherited the money. We assume that these prototypical pathways to wealth are so frequently reported in the media that they also exist as everyday categories in most people's minds.

In their study Sussman et al., (2014) participants rated prototypic individuals from these four categories on a number of scales like trustworthy-untrustworthy and unselfish-selfish, which were combined into measures of competence and character. They found the entrepreneur was rated most highly in terms of both competence and character, while the trader was seen as having the lowest moral character and least justification for their wealth. The heir was rated lowest for character, competence and justification for wealth. They concluded that the results show the American respondents were most positive about entrepreneurs and "relatively disdainful" about those who inherit their money or obtain it through trading. They also noted that people distinguish between how smart/competent and virtuous/characterful rich people are.

For the present study, we therefore assume that these four categories are representing different pathways in terms of agency (consequences of skill and work vs being subject to coincidence), moral acts (working for oneself or for broader interests), or being parts of social influence networks. We therefore believe that rating these four stereotypes will be sufficiently differentiated to allow different cognitive constructions of wealth creation to emerge among our respondents.

In an interesting study using the Sussman et al., (2014) model, Pietrzak (2021) content analysed 115 student essays from seven European countries to establish that west, rather than east European students were better informed about the origins of wealth. This further suggests that access to information, including financial literacy and within-group differences in intelligence should influence constructions of pathways to wealth.

# **This Study**

In this study we ask people to estimate the extent to which they think very wealthy people acquire their wealth by the four routes as outlined by Sussman et al. (2014). Rosling (2018) noted that people's inaccuracy and ignorance about many social conditions does not seem to be random but is patterned by various mindsets in the respondents. This method we believe provides a simple estimate of numbers is an unobtrusive way of detecting attitudes and eliciting the cognitive mechanisms involved in the construction of pathways to wealth

This was based on a recent study by Furnham et al., (2021) who found that perceptions of various economic issues seem prone to biases related to religious or political ideological foundations. They argued that such beliefs are related to the respondents' subjective feeling of social competition and threats. Religious activity and political engagement may stem from, or render people sensitive to, signals related to feelings of having their value systems threatened. In such cases, the perceptions of possible threats take on exaggerated proportions reflecting the heightened attention being aroused. They also found that intelligent people tended to be more accurate.

In this study we examined beliefs about how people become wealthy. Additionally, we include demographics and a crude measure of political belongingness as control variables.

First we examined beliefs in a Just/Unjust world (BJW) which is concept about the tendency of people to blame victims of misfortunes for their own fate (Lerner 1980). The idea is that people have fundamental need to believe that the (social) world is a just place and that this belief is functionally necessary for them to develop principles of deservingness. People are confronted with difficult issues like why some people get ill, are abused, descend into poverty etc. while others do not, and may be recipients of fortune. The idea of the BJW is that it helps answer some of these very difficult questions. In particular, derogating victims of injustices is a way to restore consistency and to preserve just-world beliefs. There is an extensive literature on this topic (Furnham, 2003; Dalbert & Donat, 2015; Hafer & Sutton, 2016).

The sources of extreme wealth can roughly be divided into two types, those that require a minimum effort or agency (like clever investments, being an entrepreneur or a manager of a successful enterprise) and those that simply befall the beneficiary through belonging to a group of people (like inheritance, class or other privileges). Note that both sources can be independently subjected to BJW: People might think (or dispute) that effort and smartness

should pay off, or likewise that certain groups are entitled to more resources than others (or not).

There are many BJW scales available and we chose the mostly widely known and used (Rubin & Peplau, 1975). We expected that more people believed in a just world the more they believed people became rich through their own efforts and abilities. A recent study showed that a strong BJW was associated with reduced aggression among juveniles (Larionov, Ageenkova, & Smeyan, 2021), with ramifications for how perceptions of skewed economic distributions may translate into social dissatisfaction. Thus:

H1: Beliefs in a just world (BJW) is positively related to beliefs in agentic paths to wealth and negatively related to inheritance.

Secondly, we examined self-esteem. Self-esteem has been found to correlate highly with social economic status, but also interestingly with sociometric status (Mahadevan, Gregg & Sedikides, 2021). Self-esteem seems to mediate between economic and social resources where high self-esteem provides a sense of social control. Concomitantly, self-esteem has been found to correlate strongly with narcissistic entitlement (Stronge, Cichocka, & Sibley, 2019; Zemojtel-Piotrowska, Piotrowski, & Maltby, 2017), the perception of being naturally entitled to status and resources that are unevenly distributed. Hence, we anticipated that people of high self-esteem would model inherited wealth as a likely outcome for socially powerful elites who do not need to prove their worth through work (favouring "old money"). Conversely, people with lower sense of entitlement and social control might hold negative views on wealth accumulated without discernible efforts. Thus:

H2: Self-esteem is positively related to inheritance as a source of extreme wealth.

Thirdly, we looked at Conspiracy theories (CTs) which entails the beliefs that the causes of many major social, political and economic events are due to the action of multiple, evil, secretive people with a selfish, global political goal in mind. They seem to form a *monological* belief system (Walter & Drochon, 2020) in the sense that people have a *conspiracist worldview*. They accept and integrate new CTs on a wide range of issues, and accept often strange, new and outlandish CTs because they serve a psychological function for people who feel powerless, excluded or disadvantaged (Furnham, 2020). They could be seen as superstitious, magical, and paranormal beliefs with no credible scientific evidence for them; that is, what functions do they fulfil? We assumed that the more people endorsed CTs the more they thought people inherited

their great wealth, partly because they themselves did nothing to generate the wealth, and which could have been achieved by illegal or immoral means. Thus:

H3: People holding conspiracy theories (CTs) are more likely to assume that great wealth is acquired through inheritance, i.e., non-agentic paths.

Fourthly, we looked at intelligence which, through education and occupation, is a strong predictor of wealth accumulation and an understanding of how the economic world works. There is empirical evidence that higher intelligence is associated with reduced tendency to be biased in favour of the rich and famous (McCutcheon, Zsila, & Demetrovics, 2021), and intelligence seems to calibrate people's perceptions of social statistics towards more realistic numbers across a range of social indicators and across political beliefs (Furnham, Arnulf & Robinson, 2021). We assumed that more intelligent people would know that fewer rich people achieve wealth through inheritance. We acknowledge at this point many sensitivities about the definition and measurement of intelligence as well as calls for alternative terms like "cognitive skills" to be used: however we shall continue to use the term, meaning efficiency in information processing and storage. Thus:

H4: Higher IQ scores predict a negative relationship towards inheritance as source of extreme wealth.

Finally, we examine demography namely sex and age, as well as political and religious belongingness as control variables. The inclusion of these variables is interesting since the literature on explanations of poverty and wealth are equivocal on both these variables, seeing them as weakly related to attributions. There is good reason to expect both religiousness and political ideology to be related to explanations for wealth, most particularly with respect to inheritance of wealth where less religious and more left-wing people would disapprove of and over-estimate their numbers (Furnham, Arnulf & Robinson, 2021). We do not hypothesize these effects specifically but include these variables to keep our statistical models connected to previous research in the field.

#### Method

## **Participants**

There were 502 participants: 254 males and 248 females. They ranged in age from 30-69 with a modal age of 36. In all 70.9% were graduates, which makes the sample very unrepresentative.

With regard to their religious beliefs we asked how religious they were on a 9 point scale (1=Not at all to 9=Very) they scores 3.80 (SD=3.01). They rated their political views from 1=very Conservative to 9=Very liberal with a mean of 5.83 (SD=1.81). They rated "I am an optimist" from 10=Agree to 1=Disagree with a mean of 6.74 (SD=2.15).

## **Questionnaires**

Becoming very rich: "In most developed countries the top 1% of the wealthiest people are very rich indeed. There appears to be four ways in which they make their money. Please read through these below and indicate roughly what percent of these people acquired their wealth in this way. Your four % estimates must add up to 100%. (a) Having a very senior executive position in a successful, global company (b) Being a very successful investor or financial trader (c) Being a successful entrepreneur or innovator (d) Inheriting the money from a relative". In this study, we treated a, b, and c as "agentic" sources of wealth (resulting from effort or action), while we treat d as a non-agentic source (not contingent upon any action of the subject but resulting from belonging to a family, clan or social group). The wording was taken from Sussman et al. (2014). A small percentage (<5%) failed to ensure their total was exactly 100%.

*Self-Esteem*: Participants' rated four other factors on a scale from 1-100: Physical Attractiveness (M=62.16; SD=19.23); Physical Health (M=69.07, SD=18.18); Intelligence (IQ) (M=73.09, SD=13.49); and Emotional Intelligence (M=72.81, SD=17.01). Thus, the higher the score the more people thought they were attractive, fit, bright and emotionally sensitive. The Alpha for these four items was .73 and they were summed together forming a variable labelled Self-Esteem. This simple measure has been used in a number of studies (Furnham, 2022).

Belief in a Just World. Rubin and Peplau (1975) devised a 20 item self-report inventory to measure the attitudinal continuity between the two opposite poles of total acceptance and rejection of the notion that the world is a just place. The scale has been quoted over 650 times in the academic literature. Because some items were both dated and country specific 6 were removed leaving 9 Just World and 5 Unjust World items remaining. The Cronbach Alpha in this study for the Just World was .88 and .82 for the Unjust World. Numerous studies have shown that Just and Unjust world beliefs are only moderately negatively correlated and worth examining independently (Furnham, 2003).

Conspiracy Thinking (Walter & Drochon, 2020). This was a 10-item scale devised as part of the Conspiracy and Democracy project at the University of Cambridge. It consisted of 10 statements that are generic in nature and not connected to any specific societal, economic or political systems. People note those they believe to be true. In this study the Alpha was .68. with a mean of 2.01 (SD= 1.77).

The Wonderlic Personnel Test (Wonderlic, 1990). This 50-item test can be administered in 12 minutes and measures general intelligence. Items include word and number comparisons, disarranged sentences, story problems that require mathematical and logical solutions. The test has impressive norms and correlates very highly (r = .92) with the WAIS-R. In this study we used 16 items from Form A (14, 15, 18, 21, 24, 27, 28, 29, 30, 32, 33, 34, 36, 37, 43, 46). We chose these because they did not involve spatial intelligence or questions with culture specific knowledge.

#### **Procedure**

Departmental ethical approval was gained prior to data collection (CEHP/514/2017). Data was collected on-line through *Prolific*, a platform like the better-known Amazon-Turk. We specified that they need to be over 30 years, to reduce the number of students, working and be fluent in English. Participants were compensated for their time (receiving £2.50). Usual data cleansing and checking led to around 5% of the participants recruited being rejected before further analysis because of erratic responding or taking impossibly short amounts of time to complete the task.

## Results

#### **Insert Table 1 here**

Table 1 shows that overall, people thought great wealth was achieved roughly equally (20-25%) by the three agentic routes identified (Executive, Investor, Entrepreneur) but a third by inheritance. The belief in inherited fortunes is negatively correlated with all the other measures. The three others — working as an executive, investing/trading or entrepreneurship are all mutually correlated to some degree, and all negative with inheritance. Clearly, people differ between agency and chance. It should still be noted that 45% of all respondents ranked

inheritance on top, either alone or together with any of the other categories, showing that non-agentic sources of wealth do appear to be very likely in people's perceptions.

Intelligence seems to counteract conspiracy theories and we also know that intelligence reduces statistical biases. Intelligent people are simply better informed and less susceptible to conspiracy theories, in general. Three variables seem consistently related to the ratings: religion, BJW and intelligence. They indicated that religious people, those who endorsed BJW and were of lower intelligence thought wealth due mainly to being an investor or entrepreneur but not a heir to that wealth. The executive type was correlated to religious beliefs and to IQ; in the latter case, it was even the strongest correlation across all four types.

Our H1 stating that BJW would be positively related to agentic sources of wealth was thereby confirmed. H2 stated that high scores on self-esteem would be positively correlated with beliefs in inheritance, but this hypothesis was not confirmed. Instead, there is a weak but significant correlation between self-ratings and beliefs in entrepreneurs, but this correlation disappears when using the aggregated "agentic" measures.

H3 posited that conspiracy beliefs would be positively related to a belief in inherited fortunes. However, this was not confirmed as the opposite seemed true: Conspiracy beliefs were weakly but significantly related to a belief that CEOs enrich themselves but negatively inclined towards inheritance.

Finally, H4 posited that IQ would be positively related to beliefs in agentic sources of wealth. This hypothesis was also disconfirmed in that the opposite seemed true: IQ is negatively related to all three agentic sources, but positively related to inheritance as source of wealth.

#### **Insert Table 2 here**

To explore how the eight individual difference factors related to each of the four ratings a series of regressions were run. Table 2 shows that the different factors accounted for between 5 and 8% of the variance. The results were surprisingly consistent across the four factors implicating two variables: BJW and IQ with opposite loadings.

## **Insert Figure 1 here**

An inspection of the zero-order correlations indicate that the option "inheritance" is negatively correlated with all the three other pathways to wealth. In this way, the respondents seem to differ between "agentic" options reflecting professional activities on the one hand, and "passive" reception of previously aggregated wealth on the other. Thus, our initial discussion of the difference between "agentic" and "passive" sources of wealth seems to have touched upon one major distinction in how perceived sources of wealth are related to BJW and conspiracy theories. This distinction was discernible to us from the start, but there did not exist previous research on this from which we could derive hypotheses on the topic.

Furthermore, previously detected relationships between religiousness, political orientation and conspiracy beliefs were not clearly replicated in the present study, and IQ did not show effects in the hypothesized direction. The data made us reason that BJW and conspiracy theories may be dynamically shaping the way people perceive the effects of accessing wealth, mediating the effects of other variables. Will BJW influence conspiracy theories, or is it the other way around?

To explore and illuminate the dynamics of these relationships, we tested these possibilities out in a series of structural equations, based on the aggregated variables. In all the models, we kept the agentic vs passive sources of wealth as dependent variables, testing whether conspiracy theories mediated BJW or vice versa, including or leaving out self-esteem. Again, self-esteem did not produce any effects. However, the best fit was obtained with entering IQ, BJW, religion and politics as exogenous predictor variables, with conspiracy theories moderating their influences on sources of wealth, see Figure 1. The chosen model had excellent fit statistics: Test statistics 3.044, df=2, P-value (Chi-square)=0.218, Comparative Fit Index (CFI)=0.997, RMSEA=0.032, P-value RMSEA <= 0.05 = 0.565, SRMR=0.013. This model also outperformed all alternative models.

This model provides a somewhat nuanced picture of what the data indicate: First of all, the previously known effects of political beliefs and religiousness on conspiracy theories are now discernible. More importantly, the respondents seem to hold belief systems involving BJW and conspiracy theories that organize views on how wealth is accrued through agentic channels. However, there are two distinct paths from BJW, one involving conspiracy theories and a direct path from beliefs in a just world. Belief in a Just World seems to directly predict a preference towards agentic sources of wealth, but also negatively inclined towards inheritance mediated through conspiracy beliefs. The effect of IQ seems most strongly related to a reduction in

conspiracy beliefs. When this path is specified in the model, IQ does not seem linked to any particular source of wealth. The self-ratings were left out of the model, as it did not yield any significant effects.

#### **Discussion**

This study set out to explore people's perceptions of pathways to great wealth, assuming that such perceptions will depend partly on cognitive abilities, but also on ideology as well as inclinations towards beliefs in conspiracies and/or a just world. Based on a reports on the global distribution of wealth, global elites and conspiracy theories, we assumed that beliefs in a just world would favour agentic pathways (H1), that inheritance might be favoured by people with exaggerated sense of entitlement (2), that conspiracy theories would target "un-earned" (i.e., inherited) sources of wealth (H3), and that higher IQ would reflect the general knowledge that most of the extreme fortunes these days are self-made (H4).

However, only one of our hypotheses was confirmed. It turns out that beliefs in a just world (BJW) greatly favors agentic sources of wealth, with the Entrepreneur coming out as the most likely source of wealth for people with high scores of BJW. We did not find any relationships between sense of self and sources of wealth, rendering H2 unsupported. Conspiracy theories and IQ were significantly correlated in the opposite direction to that of what we expected.

One main reason for this may be due to the initial distribution of scores on the likely sources of wealth. Our respondents were, on the whole, greatly in favour of the agentic sources, where inherited fortunes were seen as less likely. Given the strong prevalence of famous entrepreneurs in the media, it seems very possible that IQ and conspiracy theories serve as moderating the general tendency to believe in agentic paths to wealth. Given that the majority seems to rank agentic wealth on top anyhow, the various cognitive mechanisms behind this ranking may play out in different ways. Our path model suggests that in general, a belief in a just world (where efforts pay off) is by far the strongest determinant for both agentic wealth and conspiracy theories.

It was to explore these belief systems that we used a structural equation model to test the differences in BJW and conspiracy theories in mediating the effects on the belief in sources of wealth. While BJW and conspiracy theories did not seem related in the bivariate correlations, the path model suggested a more complex picture. There are in fact two almost equally strong

but different paths from beliefs in a just world to beliefs in agentic sources: One is a direct belief in the success of agentic efforts, while another is mediated through conspiracy theories. This more nuanced analysis allows us to see two sides to BJW, a "bright side" in the sense of an optimistic belief in the virtue of hard work, and a "dark side" in the shape of nefarious machinations by people betting against the general public in the form of conspiracies.

This indicates that belief in a just world makes people expect that agentic effort will pay off. On a darker note, conspiracy theorists may suspect Executives, Investors or Entrepreneurs for being associated with sinister forces in a way that exculpates mere inheritors of fortunes. A strong negative relationship between conspiracy theories and belief in inherited fortunes may indicate that mere inheritance (or entitlement) does not in itself provide fuel for conspiracy theories. Conspirations also seem to involve agency in the form of intended acts.

The path model also brings out the dynamic nature of belief systems in shaping how people interpret socio-economic information, such as knowledge about sources and distribution of wealth. In a landscape like this, cognitive resources like IQ seem primarily to be working as a suppressor of the tendency towards conspiracy theories. Realistically speaking, there are substantial proportions of inherited fortunes around in the world (Casas & Cozzi, 2022) and since capital revenues have been accumulating far quicker than paid labour in the recent decades (Piketty, 2014), not all entrepreneurs and billionaires start with the same odds. Thus, our findings may not suggest that people with high IQs underrate the importance of entrepreneurs in wealth creation. Instead, people scoring higher on IQ may express attitudes that take a less simplified view of both the optimistic and the pessimistic version of BJW. This interpretation is supported by the fact that the path coefficients from IQ towards sources of wealth are rendered insignificant once the effect on conspiracy beliefs is taken into consideration. Our findings are in line with recent publications showing that celebrity worship is significantly correlated with lower cognitive ability (McCutcheon, Zsila, & Demetrovics, 2021). However, conspiracy theory believers also seem to believe in a just world, possibly because they believe in evil agency, like the "Illuminati". In a randomly inherited world there is no good case for conspiracy theories.

We found significant but only modest effects of religious and political beliefs. Stronger religious beliefs seem to work along the same paths as BJW and conspiracy theories, and conservative political attitudes seem slightly more inclined to believe in "old money".

Some people may argue that those with "old money" which is related to inheritance are more respectable, and those with "new money" who may be perceived as unsophisticated and unaware of the *noblesse oblige* concept (Furnham 2014). On the other hand, rich people can be perceived as selfish, greedy and narcissistic whatever their source of wealth.

It has been suggested that attitudes to money, particularly wealth can bring out the worst in individuals whose attributions are fed by envy and loathing (Furnham, 2014). The findings in our study supports previous research, suggesting that people think very rich people are most deserving when the work hard for their money (in senior management roles) or use their talents and take risks (as entrepreneurs) (Sussman et al. 2014). They are seen as less deserving when the ride the fortunes and vicissitudes of the market or inherit their money from relatives or patrons. These however may be western views not shared by people from developing or excommunist countries.

Our research shows that while people seem to hold a fairly realistic picture of the sources of wealth in their surrounding society, the understanding of the background and vicissitudes of wealth creation is complex. Interpreting and forming mental models of wealth creating depends on psychological as well as cultural contexts. The ensuing mental models and mindsets seem to take shortcuts with considerable potential for political movements such as conspiracy theories and social unrest, but also with a brighter side informing economic activities and choices of entrepreneurial careers (e.g., Mathisen & Arnulf, 2013). This is a neglected area of research and one which seems important to how people vote. It would have been interesting to know about how much money they believe constitutes great wealth (expressed day in dollars or Euro's) as well as their attitude to very famous international people of great wealth like Elon Musk or George Soros.

Like all others this study had limitations. First it should be acknowledged that the four routes identified by Sussman et al., (2014) are not mutually exclusive. Thus, some very wealthy individual's inherit large sums of money which they invest shrewdly or use to become entrepreneurial. The data available suggest that amongst the very wealthy, there are almost none that did little with the sums of money that they invested.

It would have been advantageous also to ask people directly what they thought about each money type, as done by Sussman et al., (2014). It would be interesting to note such things as how much they attempted to avoid tax, their charitable giving and what laws should be put in place to encourage or discourage various behaviours that lead to great wealth such as grant to

approved entrepreneurial ventures and increased legislation in the financial trading. In many countries, entrepreneurs are lauded and given heroic status while financial traders, particularly those caught breaking the law with insider trading or ponzi schemes are vilified. Finally, we have to acknowledge that this was far from a representative sample with a bias to better educated people, and brighter people, who are often less religious, more politically liberal and do not endorse CTs. Hence it is important to replicate these results.

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Table1. Correlations between the variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
(1)W1: Executive	21.85	15.91											
(2)W2: Investor	22.59	15.13	.30***										
(3)W3: Entrepreneur	25.39	16.35	.15**	.32***									
(4)W4: Inheritance	33.42	24.24	36***	36***	38***								
(5) Sex	1.49	.50	.06	.09	.02	07							
(6) Age	37.96	8.02	03	06	.05	.03	.00						
(7) Religious	3.80	3.01	.09*	.12**	.16***	11*	.04	.02					
(8) Politics	5.83	1.81	02	06	10*	.16***	.13**	03	23***				
(9) Self-Ratings	276.86	50.71	06	.05	.13**	02	03	.02	.17***	.00			
(10) BJW	4.58	.80	.13**	.19**	.26***	19***	12***	.06	.16**	14**	.19***		
(11) Conspiracy	2.02	1.77	.13**	.06	.09	10*	.11*	05	.41***	23***	.00	02	
(12) IQ	10.27	2.83	23***	15**	14**	.16***	15***	.05	25***	.08	.04	.03	36***

<sup>\*\*\*</sup>p<.001 \*\*p<.01 \*p<.05 Sex Coded (1=Male; 2=Female)

Table 2. Regressions for the four criterion variables

		W1: E	xecutive		W2: Investor					W3: En	trepreneur		W4: Inheritance				
	В	SE	Beta	t	В	SE	Beta	t	В	SE	Beta	t	В	SE	Beta	t	
Sex	1.25	1.47	.04	0.85	2.80	1.40	.09	2.00*	1.05	1.49	.03	0.70	-4.67	2.23	10	-2.09*	
Age	08	.09	04	-0.84	14	.09	07	-1.62	.09	.09	.04	0.97	.09	.14	.03	0.66	
Religious	.21	.27	.04	0.78	.48	.26	.10	1.88	.48	.27	.09	1.77	31	.41	04	-0.77	
Politics	.20	.42	.02	0.48	35	.40	04	-0.86	32	.43	04	-0.74	1.60	.64	.12	2.51*	
Self-ratings	03	.02	09	-1.92	.00	.01	.01	0.20	.02	.02	.07	1.53	.01	.02	.03	0.57	
BJW	.18	.08	.11	2.33*	.21	.07	.14	2.94**	.37	.08	.22	4.82***	50	.12	20	-4.30***	
Conspiracy	.32	.47	.04	0.68	39	.45	05	-0.86	01	.48	00	-0.02	07	.72	01	-0.10	
IQ	-1.23	.28	22	-4.46***	68	.26	13	-2.61**	68	.28	12	-2.46*	1.01	.42	.12	2.42*	
Adjusted R <sup>2</sup>	Adjusted $R^2$ .063			.047					).	083		.071					
F	4.923			3.882				6.266					5.446				
p	.000				.000				.000					.000			

<sup>\*\*\*</sup>p<.001 \*\*p<.01 \*p<.05

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**Figure 1:** Structure equation model of the main variables, showing the pathways predicting agentic or inherited sources of wealth. Significant coefficients marked with asterisks. Test statistics 3.044, df=2, P-value (Chi-square)=0.218, Comparative Fit Index (CFI)=0.997, RMSEA=0.032, SRMR=0.013

