

RESEARCH ARTICLE

# Effects of dispositional greed and need for cognition on consumer judgments of cryptocurrency and stocks

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## Abstract

The volatile cryptocurrency market offers investors the chance for substantial capital gains. In this research, we examine the role of dispositional greed and need for cognition (NFC) on judgments about crypto and stocks. Drawing on the dualistic model of passion, we examine two potential mediators of the effects: harmonious passion (HP) and obsessive passion (OP). *Journal of Personality and Social Psychology*, 85(4), 756–767. <https://doi.org/10.1037/pssp0000031>, we examine two potential mediators of the effects: harmonious passion (HP) and obsessive passion (OP). Following a preregistered survey ( $N = 258$ ), we found that the effect of greed on crypto judgments was mediated by HP rather than OP. This result was replicated for stocks. The effect of NFC on attitudes was mediated by HP. The findings show that (1) dispositional greed and NFC offer insights into consumer judgments of crypto and stocks, (2) HP rather than OP mediates the effects of greed and NFC on crypto and share judgments, and (3) that the effects of dispositional greed and NFC on judgments is similar for crypto and stocks.

## 1 | INTRODUCTION

The volatile global cryptocurrency (“crypto”) market offers the opportunity for investors to make substantial capital gains. Crypto is a digital asset, which exists on a blockchain (Martin et al., 2022). In a crypto market where prices can rise or drop substantially, stories abound in the media about crypto investors who have made significant monetary gains (Cuen, 2020; Ginsburg & Rennolds, 2022; Zaman, 2022). Yet what drives investor interest in crypto is unclear. Media narratives of crypto trading suggest that investors are driven by greed (Carlson, 2017; Keoun & Godbole, 2020). Other media narratives suggest that successful crypto investors should avoid greed and engage in the rational contemplation of market data when investing in crypto (Genç, 2022).

Prior research has begun to explore the role of individual differences and perceptions of crypto. Research has studied the Big Five traits (Sudzina, Dobes, & Pavlicek, 2021), the Dark Tetrad (Martin

et al., 2022), and trait reactance (Martin, Chrysochou, & Strong, 2022). However, what has not been explored has been the role of dispositional greed and need for cognition (NFC) in how individuals view cryptocurrency. Regarding dispositional greed, the potential large monetary gains for crypto and stocks seem likely to appeal to an individual's greed. It is plausible that people who have an insatiable desire for more (in this case, more money/increased financial net worth) would be interested in crypto. Similarly, for NFC, investors who enjoy the intellectual challenge of considering market information to select investments may be interested in buying crypto and stocks.

### 1.1 | The present study

For consumers, cryptocurrency and stock investments involve decision-making under risk. There is uncertainty as to whether

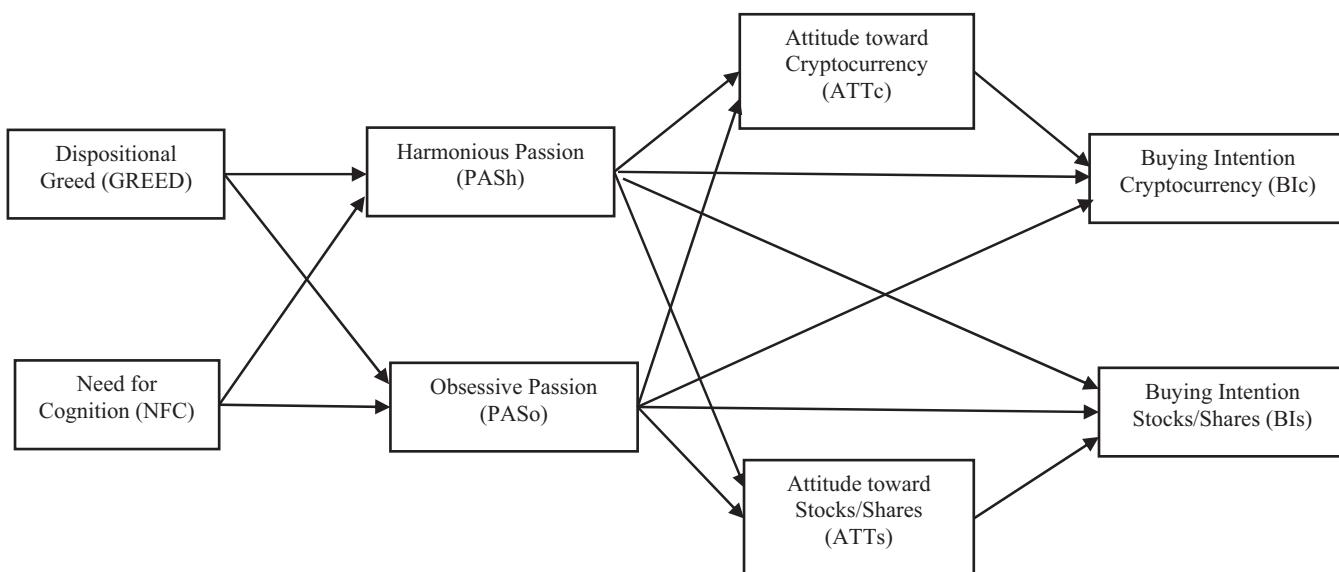
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consumers will make a monetary gain or a loss. Prospect theory (Kahneman & Tversky, 2013) predicts that people experience loss aversion where a loss is felt more strongly than a gain of the same magnitude. This is in contrast to expected utility theory where a rational process occurs where expected utilities are weighted by their probabilities of occurring. For consumers, research indicates that this consumer risk aversion tends to be greater for monetary decisions involving more money (Mittal et al., 2019). This suggests that consumers may be risk averse for the potential losses, which may occur from a poor crypto or stock investment outcome. Yet Cokely and Kelley (2009) in a study of individual differences in risky choices suggest that superior risky decision performance is affected by an individual's cognitive style. They call for research on how individual differences in traits and motivation influence decision making under risk. We answer this call for research on individual differences by studying NFC and dispositional greed. NFC is relevant as a measure of cognitive style. Greed is relevant as dispositional greed has been shown in brain scans to be associated with loss aversion (Li et al., 2019).

In the present research, we investigate whether dispositional greed and NFC affect consumer judgments for cryptocurrency and judgments for stocks (see Figure 1). Greed is the insatiable desire for more (Zeelenberg & Breugelmans, 2022). A greedy person has a desire to acquire more of a valued outcome and is perpetually dissatisfied with not having acquired enough. Greed can also result in a person taking more than their fair share of a communal resource (Cozzolino et al., 2009). Dispositional greed involves individual differences in the extent to which a person is greedy (Hoyer, Zeelenberg, & Breugelmans, 2021). Although greed relates to more than money (e.g., food, sexual partners, and status objects), research suggests greed could be relevant to crypto investing. Dispositional greed has been found to be significantly correlated with investing in stocks (Mussel & Hewig, 2016) and an intention to practice tax evasion or unethically claim state benefits (Seuntjens et al., 2019). Zeelenberg,

Seuntjens, van de Ven, and Breugelmans (2020) found that dispositional greed was positively associated with the perceived importance of money ( $r = 0.32, p < .001$ ). Thus, dispositional greed seems a relevant individual difference to gain insights into the judgments people have about crypto and stocks given the potential for substantial capital gains that both assets offer investors. Indeed, prior psychological research has called for research on dispositional greed and crypto judgments (Martin, Chrysochou, & Strong, 2022). Thus, we explore the effect of dispositional greed on crypto judgments and share judgments. We predict that dispositional greed will be positively associated with consumer attitude toward crypto and their intention to buy crypto. A similar pattern is predicted for their attitude and buying intention for stocks.

NFC involves the extent to which individuals tend to engage in and enjoy thinking (Cacioppo & Petty, 1982), especially effortful cognitive activities. NFC reflects dispositional differences in cognitive motivation (Mourali, Laroche, & Pons, 2005). Higher-NFC people process and elaborate information systematically, whereas lower-NFC people prefer quick, low effort, and heuristic-based decisions (Rast et al., 2015). Research indicates that NFC is positively associated with complex problem solving (Nair & Ramnarayan, 2000), insightful reasoning (Vranic, Rebernjak, & Martincevic, 2021), and whether people are motivated to process complex or simple messages (See, Petty, & Evans, 2009). Further from a consumer perspective, NFC influences the extent to which people consider different product features (Goodman & Irmak, 2013; Haugtveldt, Petty, & Cacioppo, 1992) and the product information on websites (Martin, Sherrard, & Wentzel, 2005). High-NFC consumers are also more likely to use online information services than low-NFC consumers (Kaynar & Amichal-Hamburger, 2008) and adopt a rational thinking style that considers hypothetical, future possibilities (Berzonsky & Papini, 2021). For the present research, NFC appears relevant to consumer investing as buying individual stocks can involve the study of numerous



**FIGURE 1** Conceptual model.

financial ratios (e.g., price to earnings), cash flow statements, balance sheets, and company annual reports to reach a decision to invest. In other words, the extensive amount of information and data that is available about stocks for investors should attract high-NFC people. Like stocks, crypto also offers a variety of information to potential investors (e.g., crypto terms such as market caps, farming, and staking; protocols and fees for buying crypto). Thus, higher NFC consumers may be more interested investing in crypto and stocks.

Indeed, if one considers the view that buying crypto can be akin to gambling (Delfabbro, King, & Williams, 2021; Mills & Nower, 2019) with a financial risk offering a potential windfall (Wohl, Branscombe, & Lister, 2014), NFC is still relevant in this context. Mouneyrac et al. (2018) found in a study of gamblers that higher NFC was associated with people playing strategic games where success is related to chance and the skill of the player (e.g., poker and sports betting), rather than nonstrategic games where success only related to chance (e.g., lotteries, slot machines, and roulette). Thus, it is possible that crypto and stocks may appeal to higher NFC individuals as a strategic gamble (e.g., the perceived chance of crypto/stock price gains and using investor skill derived from knowledge about an asset). We predict that NFC will be positively associated with a desire to buy crypto and stocks.

For mediators, we explore whether the effects of dispositional greed and NFC on judgments are mediated by harmonious passion (HP) or obsessive passion (OP). The dualistic model of passion (Vallerand et al., 2003) defines passion as "a strong inclination toward a self-defining activity that people love, find important, and in which they invest time and energy" (Vallerand, 2010). This model also proposes two types of passion that motivate people to engage in activities: HP and OP. HP is where a person freely chooses to engage in an activity, which is in harmony with other aspects of their life (Ratelle et al., 2013). There is an autonomous choice by the individual to engage in the activity (e.g., painting as a hobby). In contrast, OP represents an uncontrollable desire to engage in the activity that one has passion for. With OP, a person cannot resist the urge to engage in an activity, which can result in that behavior affecting other aspects of a person's life. OP is generally associated with maladaptive outcomes such as conflict between the behavior a person is obsessed with and other life domains, and the negative affect and rumination a person may experience in relation the passionate activity (Dalpé et al., 2019; Lafrenière et al., 2012; Vallerand, 2010). For instance, Skitch and Hodgins (2005) in a study of gambling found that while problem gamblers experienced HP and OP, only OP was associated with actual problem gambling behavior.

Prior research has shown that personality traits (the Big Five) are associated with HP and OP (Breu & Yasser, 2022; Dalpé et al., 2019). In the present research, we expect the effect of dispositional greed on crypto and share judgments to be mediated by HP rather than OP. Prior research has shown that affective states can influence an individual's levels of financial risk aversion related to stocks (Kramer & Weber, 2012). Specifically, greedy individuals should engage in crypto investing as an enjoyable activity which they make an autonomous decision to engage in (i.e., HP), rather than being a compulsive

behavior to buy crypto that they cannot control, and which rules their life (i.e., OP). For NFC, Bye (2012) asserts that NFC would be associated with HP as NFC involves enjoying effortful cognitive activity, and HP involves positive affect from task engagement. Relatedly, NFC is positively correlated with the Big Five trait of conscientiousness (Powell & Nettelbeck, 2014; Tuten & Bosnjak, 2001). Further, HP but not OP is associated with the trait of conscientiousness (Dalpé et al., 2019) and the state of concentration (Vallerand et al., 2003). Thus, NFC may be associated with HP rather than OP. NFC has also been found to be negatively associated with obsessive thinking (Ghorbani et al., 2004). Consequently, we expect the effects of NFC on crypto and share judgments to be mediated by HP but not OP.

## 2 | METHODS

### 2.1 | Participants and procedure

The study was approved by an ethics committee (SREC reference number: 2122018). Participants were U.K. residents recruited from Prolific Academic. They completed the study in exchange for monetary compensation. Data collection started in June 2022 and took place in two waves. In the first wave ( $N = 502$ ; females = 48.6%, non-binary/third gender = 1.2%;  $M_{age} = 41.8$ ;  $SD = 13.4$ ) participants reported responses to the independent measures, background questions in relation to investment behavior and cryptocurrency, and socio-demographic background. For participant recruitment, participants in the first wave who were aware about cryptocurrency, had experience investing, and who agreed to participate in a follow up survey ( $N = 279$ ), were invited to participate in the second wave ( $N = 258$ ; females = 35.3%, other/prefer not to say = 1.2%;  $M_{age} = 42.4$  years;  $SD = 13.6$ ; return rate = 92.5%). This wave measured the dependent measures and mediator variable. The purpose of conducting the data collection across two waves allowed us to screen out ineligible participants, and mostly to eliminate common method bias (through temporal separation of measurement) that is common in correlational studies (Podsakoff et al., 2003). Table 1 presents characteristics of the final sample characteristics (Table S1 provides descriptive statistics for both waves).

Specifically, 60.9% of the sample confirmed being interested in investing in financial assets (including cryptocurrency), and 68.6% have less than 5 years of investing experience. About 43.8% of participants answered that they own cryptocurrency, while from those answering no (56.2%), 35.2% said they would be interested in investing in the future. In a similar fashion, 74.0% of participants answered that they own shares/stocks, while from those answering no (26.0%), 70.1% said they would be interested in investing in the future.

Prior to data collection we conducted a power analysis using G\*Power to determine the adequacy of the sample size (Faul et al., 2009). Using the suggested minimum values by Cohen (1988), a minimum  $R^2$  value of 0.10, a statistical power of 80%, and 6 predictors, the a priori G\*Power calculation indicated that a sample size of minimum 143 would be required.

**TABLE 1** Sample background ( $N = 258$ ).

	<i>N (%)</i>		<i>N (%)</i>
Gender (%)		Are you aware of cryptocurrency? (%)	
Male	164 (63.6)	Yes	258 (100.0)
Female	91 (35.3)	No	- (0.0)
Non-binary/third gender	3 (1.2)	Are you interested in investing in stocks, bonds, or cryptocurrency? (%)	
Mean age (SD)	42.4 (13.6)	Yes	157 (60.9)
Education (%)		Maybe	71 (27.5)
Primary school	1 (0.4)	No	30 (11.6)
Post primary school	12 (4.7)	What is your experience in investing in stocks, bonds, or cryptocurrency? (%)	
Further education	70 (27.1)	Never	- (0.0)
Undergraduate higher education	107 (41.5)	Less than a year	63 (24.4)
Professional education	61 (23.6)	1–5 years	114 (44.2)
Doctorate	7 (2.7)	6–10 years	25 (9.7)
Marital status (%)		11–15 years	12 (4.7)
Single	74 (28.7)	16–20 years	14 (5.4)
Married	110 (42.6)	More than 20 years	30 (11.6)
Cohabiting	60 (23.3)	Do you own any cryptocurrency? (%)	
Divorced	12 (4.7)	Yes	113 (43.8)
Widowed	2 (0.8)	No	145 (56.2)
Annual Income (%)		[If no] Would you be interested in investing in cryptocurrency? (%)	
Less than £10,000	24 (9.3)	Yes	51 (35.2)
£10,000–£19,999	45 (17.4)	No	94 (64.8)
£20,000–£29,999	74 (28.7)	Do you own any shares/stocks? (%)	
£30,000–£39,999	48 (18.6)	Yes	191 (74.0)
£40,000–£49,999	28 (10.9)	No	67 (26.0)
More than £50,000	25 (9.7)	[If no] Would you be interested in investing in shares/stocks? (%)	
		Yes	47 (70.1)
		No	20 (29.9)

## 2.2 | Measures

### 2.2.1 | Dependent measures

Attitude toward cryptocurrency and stocks were assessed with three items (bad/good, unfavorable/favorable, and negative/positive) adapted from Martin, Chrysochou, and Strong (2022). Buying intention for cryptocurrency and stocks were assessed with three items (unlikely/likely, unfavorable/favorable, and negative/positive) adapted from Martin, Chrysochou, and Strong (2022). All items were measured on a 7-point bipolar scale. Table S2 provides all measures used in this research.

### 2.2.2 | Independent measures

We assessed NFC based on the Cacioppo, Petty, and Feng Kao (1984) scale. The scale consists of 18 items measured on a 5-point scale (e.g., “The notion of thinking abstractly is appealing to me,” 1 = extremely uncharacteristic of me; 5 = extremely characteristic of me), and for analysis individual scores were summed for the total score.

We assessed dispositional greed based on the scale from Seuntjens et al. (2015). The scale consists of seven items measured on a 7-point agreement scale (e.g., “It doesn’t matter how much I have. I’m never completely satisfied,” 1 = strongly disagree; 7 = strongly agree).

### 2.2.3 | Mediators

We assessed OP and HP based on Vallerand et al. (2003). The scale consists of 14 items measured on a 7-point agreement scale (e.g., “Investing allows me to live a variety of experiences,” 1 = strongly disagree; 7 = strongly agree).

### 2.2.4 | Other measures

The questionnaire followed a similar approach to Martin, Chrysochou, and Strong (2022) and assessed participants’ experience with investing in financial assets, current ownership of cryptocurrency, and their interest in investing in cryptocurrency in case they did not own any.

We further included a scale measuring importance of money by Franzen and Mader (2022) that was used for exploratory purposes. The scale consists of eight items measured on a 7-point agreement scale (1 = strongly disagree; 7 = strongly agree).

## 2.2.5 | Statistical analysis

Our analysis followed the study's preregistered protocol ([https://osf.io/3t65g/?view\\_only=ecd6ae107df94f9d9169fa463e1c0bea](https://osf.io/3t65g/?view_only=ecd6ae107df94f9d9169fa463e1c0bea)). Descriptive analysis and correlations were performed in SPSS version 28. The assessment of the path model was performed in SmartPLS 4 (Ringle, Wende, & Becker, 2022), following a bootstrapping procedure (10,000 samples). All latent constructs were treated as reflective, with the exception of NFC for which the scores were summed up to form an index before the analysis. We did not control for anything else apart from what was included in the model.

## 3 | RESULTS

### 3.1 | Descriptive measures and correlations

Table 2 presents the means, internal consistency, and intercorrelations between measures included in the model. Detailed descriptive measures for manifest items of each scale appear in the Supplementary Material (i.e., Supplementary Table 3: means, standard deviations, and Cronbach alphas; Supplementary Table 4: Correlation matrix of measures). Correlation coefficients are positive and low to moderate, with an exception between buying intentions and attitudes where the correlation is high.

### 3.2 | Path model

#### 3.2.1 | Validation of measurement model and model fit

Results in relation to measurement reliability and validity are presented in the Data S1. Composite reliabilities of all latent variables

exceeded the accepted threshold of 0.70, indicating a high level of internal consistency (Jarvis et al., 2003). Average variance extracted (AVE) values all exceeded the threshold of 0.50, indicating adequate convergent validity (Hair et al., 2017). Table S5 reports AVE values. The heterotrait-monotrait ratio of correlations (HTMT) was below the threshold of 0.90, indicating proper discriminant validity (Henseler, Ringle, & Sarstedt, 2015). Table S6 shows discriminant validity results. The Stone-Geisser  $Q^2$  values for attitude toward cryptocurrency ( $Q^2 = 0.016$ ), attitude toward stocks/stocks ( $Q^2 = 0.011$ ), buying intention for cryptocurrency ( $Q^2 = 0.040$ ), buying intention for stocks/stocks ( $Q^2 = 0.010$ ), HP ( $Q^2 = 0.099$ ), and OP ( $Q^2 = 0.129$ ) were larger than zero, supporting the predictive relevance of the model (Hair et al., 2017). Overall, the variance explained is moderate for buying intention toward cryptocurrency ( $R^2 = 0.72$ ) and buying intention toward stocks/stocks ( $R^2 = 0.59$ ), whereas it is weaker for attitude toward cryptocurrency ( $R^2 = 0.07$ ), attitude toward stocks/stocks ( $R^2 = 0.23$ ), HP ( $R^2 = 0.12$ ), and OP ( $R^2 = 0.15$ ) (Hair et al., 2017). Lastly, the standardized root mean square residual value for the saturated structural model was 0.058, indicating a good model fit as it is below the threshold of 0.08 (Hair et al., 2017).

#### 3.2.2 | Structural model results

Table 3 presents the path estimates of the model. Dispositional greed has a positive effect on HP ( $b = 0.32$ ) and OP ( $b = 0.37$ ). NFC has a positive effect on HP ( $b = 0.19$ ) and OP ( $b = 0.14$ ). HP has a positive effect on attitude toward stocks/stocks ( $b = 0.47$ ), attitude toward cryptocurrency ( $b = 0.22$ ), but no significant effect on buying intentions. OP has no significant effects on attitudes or buying intentions. Finally, attitude toward cryptocurrency has a positive effect on buying intention for crypto ( $b = 0.82$ ), and attitude toward stocks/stocks has a positive effect on buying intention for stocks/stocks ( $b = 0.78$ ).

For mediation (Table 4), the effects of dispositional greed on attitude toward crypto and attitude toward stocks/stocks is mediated through HP ( $b = 0.07$  and  $b = 0.17$ , respectively). The effects of dispositional greed on buying intention for crypto and stocks/stocks is serially mediated through HP and attitude toward crypto and attitude toward stocks/stocks ( $b = 0.06$  and  $b = 0.12$ , respectively). The effect

**TABLE 2** Descriptive statistics and Pearson correlations between variables.

	$\alpha$	Mean (SD)	1	2	3	4	5	6	7
1. Need for cognition (NFC)	0.92	61.00 (12.03)							
2. Dispositional greed (GREED)	0.88	3.49 (1.25)	−0.12						
3. Buying intention for cryptocurrency (Blc)	0.97	3.59 (1.96)	0.00	.26**					
4. Buying intention for stocks/shares (Bls)	0.97	5.48 (1.55)	0.11	0.06	−0.01				
5. Attitude toward cryptocurrency (ATTc)	0.96	3.63 (1.70)	−0.06	.19**	.84**	−0.06			
6. Attitude toward stocks/shares (ATTs)	0.97	5.26 (1.26)	0.07	0.11	0.02	.77**	0.04		
7. Harmonious passion (PASH)	0.92	3.89 (1.24)	.15*	.28**	.30**	.34**	.25**	.47**	
8. Obsessive passion (PAAo)	0.94	2.01 (1.16)	.10	.35**	.24**	.20**	.19**	.30**	.63**

Note: All variables are measured on a 7-point scale, except for need for cognition (5-point).

\* $p < .05$ . \*\* $p < .01$ .

**TABLE 3** Path estimates for main effects of the model.

Path	Path coefficient	t-test	p-value	CI 95%
ATTc → Blc	0.82	35.03	.000	0.77–0.86
ATTs → Bls	0.78	22.70	.000	0.71–0.84
GREED → PASH	0.32	5.50	.000	0.21–0.43
GREED → PASo	0.37	6.72	.000	0.27–0.48
NFC → PASH	0.19	3.03	.002	0.06–0.31
NFC → PASo	0.14	2.56	.010	0.03–0.25
PASH → ATTc	0.22	2.90	.004	0.07–0.36
PASH → ATTs	0.47	5.63	.000	0.30–0.63
PASH → Blc	0.07	1.52	.128	–0.02 to 0.15
PASH → Bls	–0.01	0.13	.898	–0.13 to 0.11
PASo → ATTc	0.06	0.73	.466	–0.10 to 0.22
PASo → ATTs	0.01	0.15	.885	–0.13 to 0.15
PASo → Blc	0.04	0.91	.364	–0.05 to 0.12
PASo → Bls	–0.03	0.59	.558	–0.13 to 0.07

**TABLE 4** Path estimates for indirect effects of the model.

Path	Path coefficient	t-test	p-value	CI 95%
GREED → PASH → ATTc	0.07	2.46	.014	0.02–0.13
GREED → PASH → ATTc → Blc	0.06	2.47	.014	0.02–0.11
GREED → PASH → ATTs	0.15	3.74	.000	0.08–0.24
GREED → PASH → ATTs → Bls	0.12	3.63	.000	0.06–0.19
GREED → PASH → Blc	0.02	1.33	.183	–0.01 to 0.06
GREED → PASH → Bls	0.00	0.12	.902	–0.04 to 0.04
GREED → PASo → ATTc	0.02	0.71	.476	–0.04 to 0.09
GREED → PASo → ATTc → Blc	0.02	0.71	.476	–0.03 to 0.07
GREED → PASo → ATTs	0.00	0.14	.888	–0.05 to 0.06
GREED → PASo → ATTs → Bls	0.00	0.14	.888	–0.04 to 0.05
GREED → PASo → Blc	0.02	0.86	.390	–0.02 to 0.05
GREED → PASo → Bls	–0.01	0.57	.570	–0.05 to 0.03
NFC → PASH → ATTc	0.04	2.04	.041	0.01–0.09
NFC → PASH → ATTc → Blc	0.03	2.04	.041	0.01–0.07
NFC → PASH → ATTs	0.09	2.65	.008	0.03–0.16
NFC → PASH → Blc	0.01	1.28	.201	0.00–0.04
NFC → PASH → Bls	0.00	0.12	.902	–0.03 to 0.02
NFC → PASH → ATTs → Bls	0.07	2.62	.009	0.02–0.13
NFC → PASo → ATTc	0.01	0.67	.504	–0.02 to 0.04
NFC → PASo → ATTc → Blc	0.01	0.67	.503	–0.01 to 0.03
NFC → PASo → ATTs	0.00	0.13	.895	–0.02 to 0.03
NFC → PASo → ATTs → Bls	0.00	0.13	.895	–0.02 to 0.02
NFC → PASo → Blc	0.01	0.81	.417	–0.01 to 0.02
NFC → PASo → Bls	0.00	0.54	.591	–0.02 to 0.01
PASH → ATTc → Blc	0.18	2.88	.004	0.05–0.30
PASH → ATTs → Bls	0.37	5.42	.000	0.23–0.50
PASo → ATTc → Blc	0.05	0.73	.466	–0.08 to 0.18
PASo → ATTs → Bls	0.01	0.15	.885	–0.10 to 0.12

of NFC on attitudes toward stocks/stocks is also mediated through HP ( $b = 0.09$ ). Further, the effect of NFC on buying intention for cryptocurrency is serially mediated through HP and attitude toward cryptocurrency ( $b = 0.03$ ), and the effect of NFC on buying intention for stocks/stocks is serially mediated through HP and attitude toward stocks/stocks ( $b = 0.07$ ).

## 4 | DISCUSSION

The present research studied the effect of dispositional greed and NFC on crypto and share judgments. Further, two mediators were studied: HP and OP. We found that the effect of dispositional greed on crypto and share judgments was mediated by HP. This pattern of results was replicated to a lesser extent for NFC. This research offers theoretical contributions to the literature. First, we show that individual differences in dispositional greed and NFC offer insight into why people intend to buy crypto. Specifically, consumers who are higher in greed like cryptocurrency and stocks. In addition, NFC is associated with an interest in crypto and stocks. Second, a further contribution is our insight into the mechanism that underlies these effects for greed and NFC on consumer judgments of crypto and stocks. Our research shows that the effect of dispositional greed and NFC on judgments is driven by a psychological state of passion. Specifically, HP rather than OP. These results indicate that crypto and share investors are not obsessively passionate about investing. Instead, the effects of dispositional greed and NFC are driven by a view of investing as an enjoyable, voluntary activity that adds to one's life, not an obsessive activity. Whether an investor is greedy and/or enjoying the cognitive effort of investing, this activity is a harmonious part of their life. Third, our research contributes by showing how consumer greed and NFC offers insight for both crypto and stocks. This is relevant as it suggests that insights from prior research on share investing may be relevant to future research on cryptocurrency investing. We found in our research similar results for crypto and stocks. This result is interesting as prior research has highlighted how crypto has features that distinguish it as an asset from traditional assets (e.g., the use of peer-to-peer trading; being stored on a public blockchain rather than being government issued, Martin et al., 2022). However, despite these differences in product attributes our research shows that at a product category level (crypto and stocks), high-greed and high-NFC people experience HP in relation to crypto as well as stocks. Fourth, the present research contributes to emerging literature on individual differences and crypto (Martin, Chrysochou, & Strong, 2022; Martin et al., 2022; Sudzina, Dobes, & Pavlicek, 2021). Prior work has studied individual differences related to the Big Five, the Dark Tetrad, and trait reactance. The present research builds on this work by providing insights for individual differences in cognitive style (NFC) and acquisitiveness motivation (dispositional greed). Studying these traits follows Feher and Vernon (2021) who recommend investigating narrow personality traits rather than only studying the Big Five traits.

As noted by a reviewer, it was surprising that no significant relationship was found between NFC and OP. One reason for this null

result may be that NFC relates to mental effort and enjoying thinking (Cacioppo & Petty, 1982). This positive valence of thinking may be why NFC did not relate to OP. OP has been shown to be positively related to negative affect and rumination (Carpentier, Mageau, & Vallerand, 2012; Dalpé et al., 2019). Similarly, Lua et al. (2023) in a recent meta-analysis of NFC and well-being, assert that NFC should be negatively related to maladaptive rumination. Future research could explore this issue with different measures of NFC (e.g., Coelho, Hanel & Wolf, 2020) or passion.

The present research has implications for various stakeholders. For financial advisors, our research suggests that information appeals (vs. low-information and emotional appeals) would be attractive to crypto investors as it would appeal to high-NFC investors. The influence of dispositional greed could also indicate that aspirational appeals showing financial success would attract consumers. Obviously from an ethical perspective, such appeals should be realistic and only presented to consumers in financially strong positions. In terms of message content, appeals should show investing as an enjoyable part of a consumer's lifestyle. For investors, our research offers insight showing how consumer personality affects cryptocurrency and share investing. We show investors how their enjoyable investing activity (HP) can be related to a need for considering information (high NFC) and a motivation for more wealth (greed). Importantly, investors can take heart that crypto investing is often a harmoniously passionate activity. Thus, this research counters potential stereotyping of crypto investors as obsessively passionate about their investing. Instead, crypto investors have HP for cryptocurrency investing. For policymakers, the influence of greed suggests the need to educate consumers of cryptocurrency coins that are promoted with urgent calls to invest (e.g., on social media) and which promise huge monetary gains for new investors. Our NFC results indicate that investors consider information (e.g., online documents) so policymakers may wish to consider information packages for investors. For example, such packages could show the financial statistics of new cryptocurrencies and/or the experience of the team behind the cryptocurrency to provide a source of verified information for new investors. Alternatively, a rating or ranking system for new cryptocurrencies could be considered to assist investors in decision-making.

### 4.1 | Limitations and future research

A limitation of the present research was the use of a cross-sectional design rather than a longitudinal design, which could show effects of dispositional greed and NFC on judgments over time. Another limitation was the use of a single measure of dispositional greed by Seuntjens et al. (2015). Research shows that many trait greed scales are positively correlated and unidimensional (Mussel et al., 2018; Zeelenberg et al., 2021). However, future research could use recent measures of greed, which capture different dimensions of greed. For instance, the multidimensional dispositional greed assessment (MDGA) scale (Lambie, Stickl Haugen, & Tabet, 2022) offer three dimensions—desire for more, insatiable pursuit of more, and a desire

to retain what is gained at all costs. Similarly, the domain-specific greed measure of Weiß et al. (2023) offers ten greed domains such as money, power (e.g., hunger for power), and performance (e.g., striving), that could reveal alternative motivations for crypto investing.

A limitation was the use of self-report measures which risks participants responding in a socially desirable way to show themselves in a positive light (e.g., as less greedy). Future research could examine other-reports by another person of a consumer's traits and behavior. Research could also use actual purchasing behavior rather than self-reported buying intention.

Further, our sample was from the U.K. Future research could improve the generalizability of the findings by testing our predictions in other countries with significant crypto ownership such as the United Arab Emirates, U.S. and Vietnam. Researchers could build on our results by examining an individual's time orientation (e.g., a present vs. past time orientation, Ferrari & Díaz-Morales, 2007) and how this affects crypto investing. In crypto, there is a well-known buy and hold strategy called HODL (derived from the misspelling of the word "hold"), which would probably appeal to people with longer-term time horizons. Research should also examine individual differences in values (Schwartz & Boehnke, 2004) that drive an interest in crypto. Given the useful insights values provide into individual judgments and behavior (e.g., Feldman et al., 2015), understanding the enduring beliefs of what people think is important in their lives may offer further insight into consumer interest in crypto.

Given that crypto is promoted as a form of digital currency, it would be interesting to test how priming people about crypto affects their prosocial responses. Prior research indicates that money cues can adversely affect peoples' prosocial responses (Savani, Mead, Stillman, & Vohs, 2016). Thus, if crypto is viewed in a manner similar to money, it may have similar effects. In addition, the privacy aspect of crypto whereby crypto accumulation can be conducted in a stealthy manner (e.g., not through a bank account) could negatively affect prosocial responses. On the other hand, the ability to send crypto electronically quickly and directly to a recipient who may need assistance, rather than through an intermediary who takes longer and charges a commission, could increase prosocial behavior. Another avenue could examine the consequences of investing success or failure particularly given the volatility in the crypto and stock markets. Lafrenière et al. (2012) found that obsessively passionate individuals tend to experience changes in their life satisfaction depending on their success (vs. failure) in the passionate activity. Future research could study how capital gains and losses from investing relate to passion and are moderated by differences in greed and NFC.

In summary, the current findings suggest that dispositional greed and to a lesser extent, NFC affect a consumer's desire for cryptocurrency and stocks. The effects of these traits on a consumer's cryptocurrency and share judgments tend to be mediated by HP not OP.

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## DATA AVAILABILITY STATEMENT

Datasets and associated files will be made available over Open Science Framework. The link is: [https://osf.io/3t65g/?view\\_only=ecd6ae107df94f9d9169fa463e1c0bea](https://osf.io/3t65g/?view_only=ecd6ae107df94f9d9169fa463e1c0bea).

## ETHICS STATEMENT

Cardiff University Research ethics committee application (Number 2122018).

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## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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