An Examination of the HEXACO Model of Personality in Cryptocurrency Users and Non-users

Roshni Sohail*, Daniel L. Andruchow, Dennis L. Morrison, Kyle A. Tuico, & Daniel S. McGrath

University of Calgary, Alberta, Canada

Abstract

Background/Rationale: Cryptocurrency is one of the fastest growing financial products today. There has been a shift towards viewing cryptocurrency as a speculative asset, associated with numerous types of financial risk. These risks make speculative cryptocurrency trading similar to gambling.

The tendency to engage in these financially risky activities can, in part, be explained by personality. For instance, the HEXACO model of personality has utility when applied to individuals who engage in gambling. Yet, our understanding of which personality characteristics drive people to engage in cryptocurrency is limited.

Methods: This study compared HEXACO personality dimensions between cryptocurrency users and non-users in a sample of young adults.

Results: Scores on each of the six HEXACO dimensions in cryptocurrency and non-cryptocurrency users are compared. Furthermore, cryptocurrency involvement and intensity of engagement is analyzed as potential moderators of this relationship.

Conclusions/Impact: The implications of these findings in terms of identifying potential underlying mechanisms for engaging in financially-risky activities will be discussed.

Introduction and Rationale

Cryptocurrency is virtual currency on the internet. Coins can be bought, sold, traded short-term, and/or held as long-term assets. When traded short-term, the risks and degree of chance involved in cryptocurrency trading equate it to gambling[1].

Cryptocurrencies have different levels of risk. Bitcoin (BTC), is viewed as far more stable and less risky compared to any other alternative coins (altcoins).

Personality describes individual patterns of thinking, feeling and behaving[2]. Differences in personality can explain the tendency to engage in financially risky activities of varying levels of risk.

The HEXACO model[3] of personality has utility in this domain. Previous research demonstrates that scores on key HEXACO dimensions (namely, H) predict young adults' gambling involvement[4].

*Correspondence: roshni.sohail1@ucalgary.ca

Objective

To determine if there is a **predictive relationship** between **HEXACO** personality dimensions and **cryptocurrency use** in young adults.

Additional exploratory analyses were conducted to examine potential differences based on:
- Frequency of involvement
- Type of coin invested in
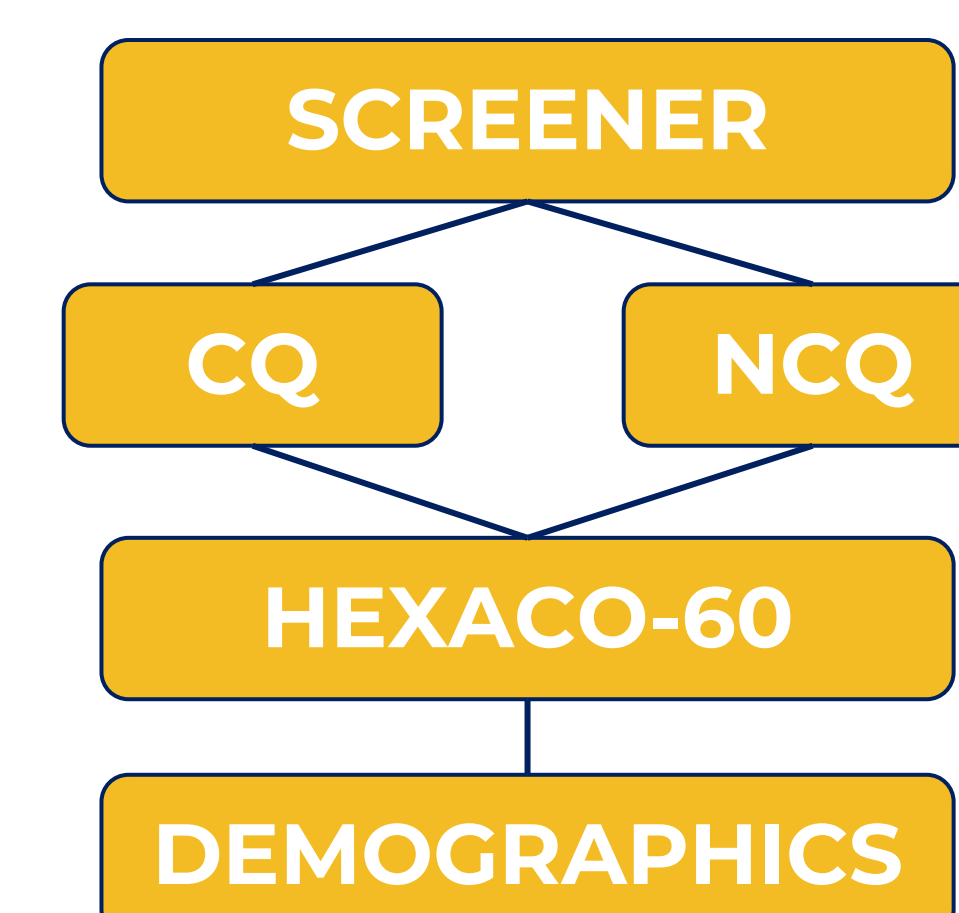
Methodology

Design: Online cross-sectional survey

Eligibility criteria: U of C student; aged 18-30.

Recruitment: Department of Psychology undergraduate research pool and posters via QR codes

Measures and Procedure

Cryptocurrency use:
    Cryptocurrency questionnaire (CQ); or
    Non-cryptocurrency questionnaire (NCQ)
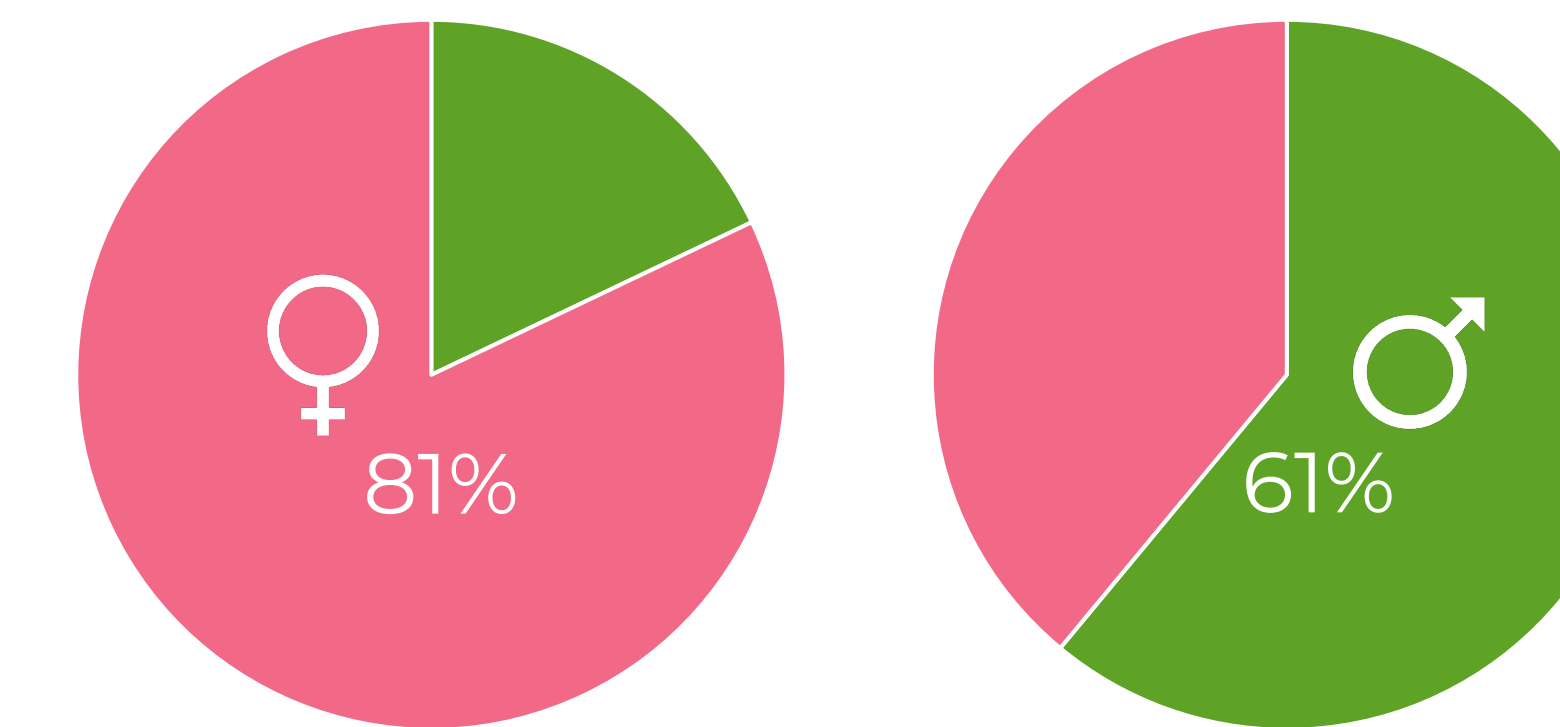
Personality: HEXACO-60[5]
    60-item, self report

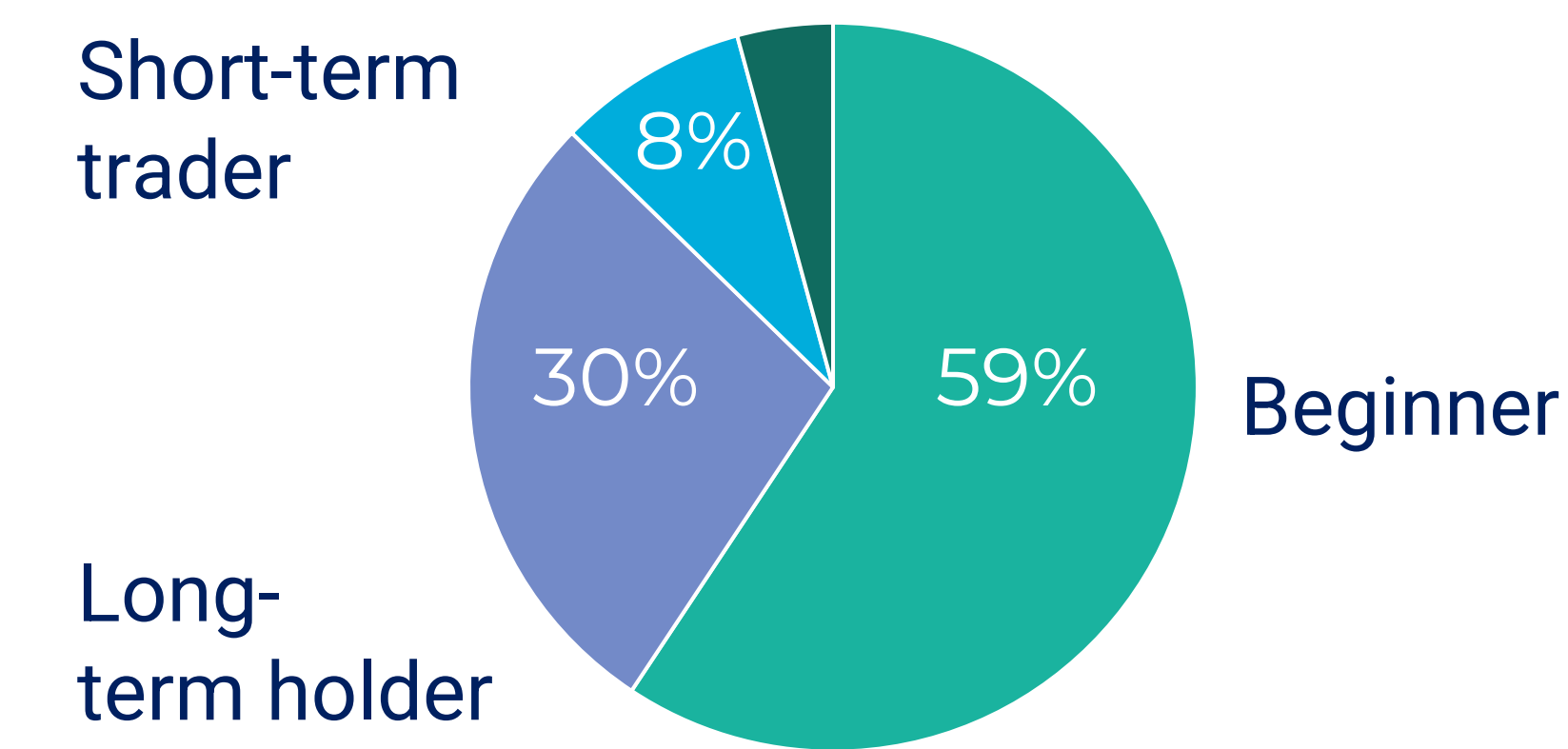
Statistical Analysis

Binary logistic regression
Predictor variables: HEXACO; Gender

Demographics

Non-users (n = 108)   Users (n = 118)

81%   61%

User Self-Identity

Short-term trader 8%
Long-term holder 30%
Beginner 59%

Results: Planned Regression

Predictor	W	p	OR
Gender	18.86	<.001*	5.08

Outcome: Non-user (0) vs User (1)

Results: Exploratory Regressions

Predictor	W	p	OR
A	8.04	.005*	3.20

Outcome: Infrequent user (0) vs Frequent user (1)

Predictor	Ws	ps	OR
All	<3.3	>.061	N/A

Outcome: Altcoin investor (0) vs BTC investor (1)

Key Findings

Cryptocurrency **use** was predicted by **gender only**.
- Males were over 5x more likely to be users

More **frequent users** were **higher in trait agreeableness**, a dimension not previously implicated in financial risk taking.
- Individuals higher in A were over 3x more likely to be frequent users
- Frequent users appear more trusting, able to manage their anger, and willing to cooperate even if the situation appears exploitative[6]

Despite differences in stability and level of investment risk, it appears **no variable** predicted altcoin versus Bitcoin use.
- Findings may be due to small sample size

Conclusions and Recommendations

This study provided a glimpse into the diverse world of cryptocurrency. It appears young adults are engaging with this market in many ways.

Conceptual similarities with other high risk financial activities (i.e., gambling) reside only in short-term speculative use, potentially explaining the lack of findings consistent with previous literature.

The differences in relative stability and risk between coins do not appear to be attracting different investors. Perhaps early crypto adopters all house a propensity towards financial risk-taking.

However, frequent users appear to be a different group from infrequent (i.e., beginners or long-term holders) users. **Studies targeting each identity group are needed** to understand the unique personality dispositions that drive each type of high-risk behavior.

References

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