

Mediating Role of Relative Deprivation in the Effect of Internet Addiction on Cryptocurrency Trading in University Students

Üniversite Öğrencilerinde İnternet Bağımlılığının Kripto Para Ticareti Üzerindeki Etkisinde Göreli Yoksunluğun Aracı Rolü

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ABSTRACT

Objective: This research was conducted to determine the mediating role of relative deprivation in the effect of internet addiction on cryptocurrency trading in university students.

Method: A descriptive and cross-sectional research design was employed with 418 university students from eastern Turkey. Data were collected using the "Personal Information Form," "Young Internet Addiction Test-Short Form," "Problematic Cryptocurrency Trading Scale," and the "Relative Deprivation Scale."

Results: Of the participants, 59.8% reported that their income matched their expenditures, 56.9% identified as male, and the mean age was 22.86 years. Internet addiction demonstrated a significant positive effect on relative deprivation (coefficient = 0.2139). Additionally, internet addiction had a direct positive effect on cryptocurrency trading (coefficient = 0.1385). Relative deprivation also showed a significant direct positive effect on cryptocurrency trading (coefficient = 0.3292).

Conclusion: Internet addiction directly influences cryptocurrency trading and also exerts an indirect effect through relative deprivation. These findings indicate that relative deprivation partially mediates the relationship between internet addiction and cryptocurrency trading.

Keywords: Psychological factors, internet addiction, relative deprivation, behavioral addiction, cryptocurrency

ÖZ

Amaç: Bu araştırma, üniversite öğrencilerinde internet bağımlılığının kripto para ticareti üzerindeki etkisinde göreli yoksunluğun aracı rolünü belirlemek amacıyla yürütülmüştür.

Yöntem: Tanımlayıcı ve kesitsel nitelikteki bu çalışma, Türkiye'nin doğusunda yer alan bir üniversitede öğrenim gören 418 öğrenciyle gerçekleştirilmiştir. Veriler, "Kişisel Bilgi Formu", "Young İnternet Bağımlılığı Testi-Kısa Formu", "Sorunlu Kripto Para Ticareti Ölçeği" ve "Görelî Yoksunluk Ölçeği" kullanılarak toplanmıştır.

Bulgular: Katılımcıların %59,8'i gelirlerinin giderlerine denk olduğunu, %56,9'u ise cinsiyetini erkek olarak beyan etmiştir. Katılımcıların yaş ortalaması 22,86'dır. İnternet bağımlılığının göreli yoksunluk üzerinde anlamlı ve pozitif bir etkisi olduğu saptanmıştır (katsayı = 0,2139). Ayrıca, internet bağımlılığı kripto para ticareti üzerinde doğrudan pozitif bir etkiye sahiptir (katsayı = 0,1385). Göreli yoksunluğun da kripto para ticareti üzerinde anlamlı ve pozitif bir etkisi bulunmaktadır (katsayı=0,3292).

Sonuç: İnternet bağımlılığı kripto para ticaretini doğrudan etkilemekte ve aynı zamanda göreli yoksunluk aracılığıyla dolaylı bir etki de göstermektedir. Bulgular, göreli yoksunluğun internet bağımlılığı ile kripto para ticareti arasındaki ilişkide kısmi bir aracı rol üstlendiğini ortaya koymaktadır.

Anahtar sözcükler: Psikolojik faktörler, internet bağımlılığı, göreli yoksunluk, davranışsal bağımlılık, kripto para

Introduction

Internet addiction is defined as the excessive and uncontrollable use of the internet, often accompanied by a diminished interest in offline activities, reduced social interactions, and an inability to regulate time spent online (Yellowlees and Marks 2007). While the internet offers immense benefits such as access to information, communication, and entertainment, its excessive use may lead to behavioral problems, including addiction. Increasing concerns regarding internet addiction have attracted scholarly attention in recent years (Karacic and Oreskovic 2017).

While internet addiction is not directly recognized as a formal diagnosis in DSM-5, "Internet Gaming Disorder" (IGD) is included as a condition requiring further study (APA 2013). Conversely, ICD-11 officially recognizes "Gaming Disorder" as a diagnosis, which typically encompasses online gaming (WHO 2018). Generally accepted criteria for internet addiction include: Preoccupation, Withdrawal symptoms, Tolerance, Loss of control, Loss of

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previous interests, Continued use despite negative consequences, Deception/concealment, Escape from dysphoric mood, Jeopardizing social relationships and opportunities. For diagnosis, at least five of these criteria typically need to be met within a 12-month period, resulting in clinically significant distress or impairment in functioning (APA 2013, WHO 2018, Andic and Durak Batigün 2021).

In recent times, owing to the pervasive adoption of the internet, both minor and major investors have acquired the facility for seamless participation in global financial markets (Bulut and Menteş 2022). Cryptocurrencies, a product of computer-generated algorithms, have emerged as a medium of exchange conducted exclusively through online channels (Park et al. 2019). Regarded as a transformative digital currency system, cryptocurrency trading has demonstrated heightened efficiency and efficacy, bolstered by an innovative framework and burgeoning market demand (Hossain 2021). Cryptocurrency itself, an alphanumeric monetary unit, operates devoid of centralized authority oversight, relying instead on encryption methodologies to ensure the integrity of its transactional processes. It diverges from the conventional characteristics associated with physical currency, instead, establishing itself within the domain of transactions conducted by individuals who maintain their anonymity. Its infrastructure leverages blockchain technology, a digital ledger that securely records both currency value and the identity of its proprietor through the employment of a cryptographic key (Singhal et al. 2018, Hossain 2021). Concomitant with technological advancements, the capacity for ceaseless trading, and the recent proliferation of technological devices, online purchasing has witnessed a substantial uptick, concurrently fostering the expansion of cryptocurrency trading. This burgeoning marketplace is regarded as an accessible avenue for wealth generation, particularly appealing to the younger demographic (Newall and Weiss-Cohen 2022). Nevertheless, it is imperative to acknowledge that such transactions carry inherent risks, with cryptocurrencies sharing discernible parallels with activities akin to gambling and manifesting tendencies reminiscent of internet addiction (Bulut and Menteş 2022). Technological advances, 24/7 trading, and increased device use during COVID-19 boosted online purchases and cryptocurrency trading, often seen as easy money, especially among youth (Newall and Weiss-Cohen 2022). However, these risky transactions can lead to behavioral addiction akin to gambling. A study found 31% of crypto traders viewed it as gambling, while 30% saw it as investment. While investment involves a long-term gain of a certain percentage of the money invested, gambling is very different (Kim et al. 2020). Furthermore, factors such as the potential for extensive online tracking, the quest for recompense following substantial losses, and the ease of conducting transactions contribute to the correlation between cryptocurrency trading and addictive behaviors, akin to problematic stock market speculation and compulsive gambling (Griffiths 2018). Given the surging popularity of cryptocurrency trading, the escalating influx of investors, and the attendant risks, including significant financial losses, there is a growing consensus emphasizing the imperative recognition of cryptocurrency trading as a public health concern (Andrade and Newall 2023, Uçar et al. 2024).

Relative deprivation, a prevalent circumstance experienced both individually and societally, exerts a notable negative impact on individuals. The initial phase in the trajectory of perceived deprivation entails an individual's cognizance of their subjectively disadvantaged position (Pak and Babiarz 2023). Several investigations underscore the adverse consequences of perceived deprivation, which include a decline in overall life satisfaction and an escalation in adverse psychological states such as depressive symptoms, stress, shame, and anxiety (Pak and Babiarz 2023, Yeşiltaş et al. 2023). It is posited that when individuals confront economic deprivation, they may seek solace or compensation in activities such as gambling, gaming, and online trading (Cena et al. 2023).

Notably, within the existing body of literature, there exists a paucity of research investigating the interplay between relative deprivation, internet addiction, and cryptocurrency trading. This present study aimed to shed light on the mediating role of relative deprivation in the association between internet addiction and the participation in cryptocurrency trading among university students.

This study seeks to address the following research questions: Firstly, it examines whether there is a significant relationship between university students' internet addiction and their engagement in cryptocurrency trading. Secondly, it investigates whether internet addiction has a significant influence on students' perceived relative deprivation. Finally, the study explores whether relative deprivation mediates the relationship between internet addiction and cryptocurrency trading among university students. This study seeks to address the following research questions: Firstly, it examines whether there is a significant relationship between university students' internet addiction and their engagement in cryptocurrency trading. Secondly, it investigates whether internet addiction has a significant influence on students' perceived relative deprivation. Finally, the study explores whether relative deprivation mediates the relationship between internet addiction and cryptocurrency trading among university students.

This study contributes to the existing literature by addressing a notable gap concerning the interrelationship between internet addiction, perceived relative deprivation, and cryptocurrency trading behavior among university students—a population increasingly engaged in digital financial practices. While previous research has explored internet addiction and financial risk behaviors separately, few studies have examined the mediating role of relative deprivation within this context. By investigating this triadic relationship, the present study offers novel insights into the psychological mechanisms underpinning cryptocurrency trading tendencies among young adults. Based on the existing theoretical framework and empirical findings, it is hypothesized that internet addiction is positively associated with cryptocurrency trading, and that this relationship is mediated by perceived relative deprivation.

Method

The study adopted a descriptive and cross-sectional research design. The study was conducted with 418 students studying at a university in eastern Türkiye May- December 2023.

Sample

The study's target population comprised students enrolled in a university located in eastern Turkey. To determine the requisite sample size, a calculation based on a 95% confidence interval ($d=0.05$), $t=1.96$, $p=0.5$, $q=0.5$, utilizing the sample formula with knowledge of the population size, yielded a minimum sample size of 372 individuals. Subsequently, a post hoc power analysis was conducted, utilizing the results obtained from the study's participant pool of 418 individuals. This analysis indicated that the study possessed a robust statistical power of 99% at a 95% confidence level, with a medium effect size (Cohen 2013). In adhering to rigorous reporting standards, the study was conducted in accordance with the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guidelines (Vandenbroucke et al. 2007).

The inclusion criteria for the study were being 18 years of age or older, actively engaging in cryptocurrency trading, and voluntarily agreeing to participate in the research. Participants were required to provide informed consent and to complete the data collection forms thoroughly. The exclusion criteria involved eliminating data forms that raised concerns regarding response reliability. Participants who did not meet the conditions for informed participation or who submitted inconsistent data were excluded from the analysis.

Procedure

The study received approval from the Scientific Research and Publication Ethics Committee of Muş Alparslan University on 04/19/2023 under the reference number 90221. Prior to commencing the research, the investigator secured the informed consent of participating students, clarifying the research's objectives, methodology, time commitment, the assurance of no harm, and emphasizing their voluntary participation. To safeguard individual rights, the study rigorously followed the Helsinki Declaration on Human Rights throughout its duration. The study was conducted by the researchers and the data collection process was carried out using online forms administered to students enrolled at Muş Alparslan University. A questionnaire form developed using the online "Google Forms" application was utilized for data collection. This method aimed to reach a larger number of participants. The link to the questionnaire was distributed to adolescents via their advisors after school, using the bulk messaging feature through email and WhatsApp (WhatsApp Inc., Menlo Park, CA). During the data collection process, no personal data was requested from the participants. Information obtained from individuals who participated in the online survey was collected in accordance with data confidentiality principles, and informed consent was obtained from each participant. Participants were required to approve this consent form before beginning the study. To prevent multiple responses and ensure data integrity, the questionnaire form was designed so that each participant could complete it only once. "Google Forms" is an online survey and form creation tool provided by Google, known for its high level of data security. Once participants completed the form online, responses were accessible only through the Google account of the researcher who created the form. The questionnaires consisted of four screens and included a total of 36 questions. On average, participants were able to complete the questionnaires within 15 to 20 minutes. No payment or any other form of compensation was offered to individuals for their participation.

Measures

"Personal Information Form", "Young Internet Addiction Test- Short Form", "Problematic Cryptocurrency Trading Scale" and "Relative Deprivation Scale" developed by the researchers drawing insights from a

comprehensive literature review were used as data collection tools.

Personal Information Form

The personal information form (age, gender, family income status, etc.) prepared by the researchers consisted of a total of five questions.

Young Internet Addiction Test Short Form

The Young Internet Addiction Test Short Form (YIAT-SF) originated from Young's work (Young 1998) and was subsequently streamlined into a shorter version by Pawlikowski et al. (2013). Its Turkish adaptation was undertaken by Kutlu et al. (2016). This version is characterized by a unidimensional structure with 12 items, relying on a 5-point Likert scale, where 1 signifies "never" and 5 indicates "always." The score range for each item on this scale spans from 1 to 5, translating to an overall minimum score of 12 and a maximum score of 60 for the entire scale. Notably, the scale does not incorporate any reverse-scored items. Higher scores are indicative of an intensified level of internet addiction. In the context of the Turkish version, the Cronbach's alpha coefficient was determined to be 0.91 for university students (Kutlu et al. 2016). In the current study, the Cronbach alpha value for the scale was set at 0.82.

Problematic Cryptocurrency Trading Scale

The Problematic Cryptocurrency Trading Scale, conceptualized by Menteş et al. (2021), was devised to quantify problematic cryptocurrency trading behaviors. This scale comprises 15 items and employs a five-point Likert scale ranging from 1 ("Never") to 5 ("Always"). It is bifurcated into two sub-dimensions. The score spectrum for the scale stretches from a minimum of 15 to a maximum of 75 points. Notably, the scale does not have a designated cut-off point, with elevated scores signifying a heightened risk of problematic cryptocurrency trading. The Cronbach's alpha reliability coefficient for the total scores was 0.91 (Menteş et al. 2021). In this study, the Cronbach alpha internal consistency coefficient of the scale was determined as 0.78.

Relative Deprivation Scale

The Relative Deprivation Scale, originally developed by Callan et al. (2011), was subsequently adapted into Turkish by Günay (2022). This scale measures perceived inequality and feelings of deprivation when individuals compare themselves to others. This sentiment can significantly impact well-being, happiness, and social adjustment. It's useful for studying how relative deprivation affects income inequality, social justice perceptions, protest behaviors, or psychological well-being. The Turkish version of this scale is unidimensional, encompassing 4 items and utilizing a 6-point Likert scale, where 1 denotes "Strongly Disagree" and 6 represents "Strongly Agree". It's worth noting that the third item on the scale is reverse coded. The scale's Cronbach's alpha coefficient was determined to be 0.77 (Günay 2022). In this study, the Cronbach alpha internal consistency coefficient of the scale was found to be 0.71.

Statistical Analysis

The present study utilized the SPSS statistical software (SPSS-25) to analyze numerical data, percentages, minimum and maximum values, as well as mean and standard deviations. In the statistical analysis section, descriptive statistics (means, standard deviations, frequencies, percentages) were used to summarize participant characteristics. Normality of the data was assessed using skewness and kurtosis values, with acceptable thresholds ranging between +2 and -2 (George and Mallery 2010). To test the study's hypotheses, linear regression and mediation analysis were conducted. Mediation analysis was performed using Model 4 of the PROCESS macro for the R programming language, based on the approach developed by Andrew Hayes (Hayes 2009). The model was constructed to examine the mediating role of relative deprivation (M) in the relationship between internet addiction (X) and cryptocurrency trading behavior (Y). The inclusion of these variables in the model was guided by both the theoretical framework and existing empirical evidence, which suggest plausible pathways between these constructs.

The decision to include relative deprivation as a mediator was based on prior literature indicating its role in psychological distress and risk-related behaviors, while the selection of internet addiction and cryptocurrency trading as independent and dependent variables, respectively, was grounded in behavioral addiction theory and recent empirical findings. All regression coefficients were tested for statistical significance using a 95% confidence level. The indirect effects were estimated using the bootstrap method (5000 samples) to ensure robustness of the mediation effect. Confidence intervals (BootLLCI and BootULCI) were calculated to determine the statistical significance of the mediation pathway.

Results

Within our study cohort, a demographic profile emerged, revealing that 56.9% of the students identified as male, while 26.8% were in their inaugural year of university studies. Furthermore, 59.8% of the participants reported income levels equating to their expenditures, and 65.3% self-reported a moderate perception of their health status. The mean age within the sample was calculated at 22.86 years, with a standard deviation of 3.50 (Table 1)

Table 1. Descriptive characteristics of individuals (n=418)			
Demographic Characteristics		n	%
Gender	Female	180	43.1
	Male	238	56.9
Grade	Freshman	112	26.8
	Sophomore	103	24.6
	Junior	110	26.3
	Senior	93	22.3
Monthly income status	Income less than expense	153	36.6
	Income equal to expense	250	59.8
	Income more than expense	15	3.6
General Health Perception	Low	66	15.8
	Medium	273	65.3
	High	79	18.9
Mean±SD (Min-Max)			
Age (Year)		22.86±3.50 (18-35)	

n: Number, SD: Standart Deviation, Min: Minimum, Max: Maximum

This study delved into the mediation dynamics between cryptocurrency trading and internet addiction concerning the variable of relative deprivation. It scrutinizes the interplay where relative deprivation serves as the intermediary link between internet addiction and cryptocurrency trading. The analytical outcomes demonstrate a noteworthy positive effect of internet addiction on relative deprivation, manifesting as a statistically significant relationship with a confidence level of 95% (coefficient = 0.2139, $p < 0.001$). This statistical insight elucidates that for each incremental unit of increase in internet addiction, relative deprivation exhibits a corresponding increase of 0.2139 units. Consequently, this outcome suggests that a heightened degree of internet addiction may potentially contribute to a commensurate escalation in the perception of relative deprivation.

Table 2. Model 4 in mediation analysis: mediator effect of relative deprivation on the effect of internet addiction on cryptocurrency commerce and its statistical results						
Model	Coefficient	Standard Deviation	t	p	LLCI	ULCI
Internet Addiction → Relative Deprivation (Total Effect)	0.2139	0.0236	9.0795	0.001	0.1676	0.2602
Relative Deprivation → Cryptocurrency Commerce (Direct Effect)	0.3292	0.0621	5.2976	0.001	0.2071	0.4514
Internet Addiction → Cryptocurrency Commerce (Total Effect)	0.2089	0.0308	6.7795	0.001	0.1484	0.2695
Internet Addiction → Cryptocurrency Commerce (Direct Effect)	0.1385	0.0327	4.2374	0.001	0.0743	0.2028
Relative Deprivation → Cryptocurrency Commerce (Indirect Effect)	0.0704	0.0188	-	-	0.0349	0.1091
		Bootstrap			Bootstrap	Bootstrap

t= Value that tests whether the regression coefficient is significantly different from zero, p= Statistical significance, LLCI (Lower Level Confidence Interval), ULCI (Upper Level Confidence Interval).

Furthermore, within this study, the direct impacts of both internet addiction and relative deprivation on cryptocurrency trading have been established as statistically significant at a 95% confidence level. The direct influence of internet addiction on cryptocurrency trading is positive (coefficient = 0.1385, $p < 0.001$), as is the direct effect of relative deprivation on cryptocurrency trading (coefficient = 0.3292, $p < 0.001$). However, given the higher magnitude of the effect attributed to relative deprivation, coupled with the hypothesized presence of a mediation effect, a comprehensive mediation model was formulated. The total effect of internet addiction on cryptocurrency trading stands at 0.2089 ($p < 0.001$). The variance between the total effect of internet addiction and its direct impact is anticipated to provide an explanation for the presence of relative deprivation within the context of this study.

Furthermore, an indirect effect of internet addiction on cryptocurrency trading has been discerned as statistically significant, employing the bootstrap method with 5000 replications. This indirect effect operates through the mediation of relative deprivation, with its magnitude quantified at 0.0704 (BootLLCI = 0.0349, BootULCI = 0.1091). Hence, the overall impact of internet addiction on cryptocurrency trading (coefficient = 0.2089, $p < 0.001$) encompasses a composite of both direct and indirect effects. In specific terms, relative deprivation serves as a mediator, contributing to the effect of internet addiction on cryptocurrency trading by an increment of 0.0704 units. However, it is important to note that relative deprivation does not assume a complete mediation role in the context of the effect of internet addiction. The statistical significance of the direct effect of internet addiction on cryptocurrency trading remains unaltered at a 95% confidence level. Relative deprivation, as observed, fulfills a partial mediating role (Table 2, Figure 1).

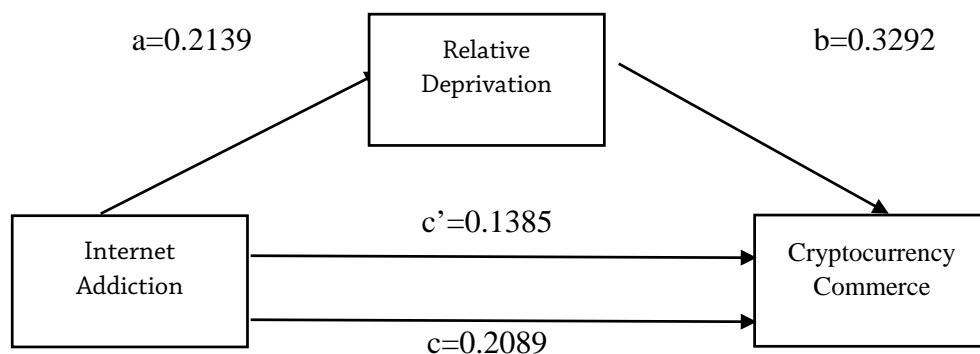


Figure 1 Mediator role of relative deprivation on the effect of internet addiction on cryptocurrency commerce. Statistical model of simple mediation analysis (Model 4).

Figure 2 illustrates the correlations and interaction patterns among internet addiction, relative deprivation, and cryptocurrency trading. The diagram visually presents the direction and strength of the relationships among these variables. Internet addiction is positively associated with both relative deprivation and cryptocurrency trading. Furthermore, relative deprivation also exhibits a positive relationship with cryptocurrency trading, underscoring its mediating role. This triadic interaction suggests that as internet addiction increases, feelings of relative deprivation also rise, which in turn leads to greater engagement in cryptocurrency trading. The figure aims to demonstrate how relative deprivation functions as a partial mediator, transmitting part of the effect of internet addiction on cryptocurrency trading. This visual model provides a conceptual summary of the hypothesized psychological mechanism examined in the study (Figure 2).

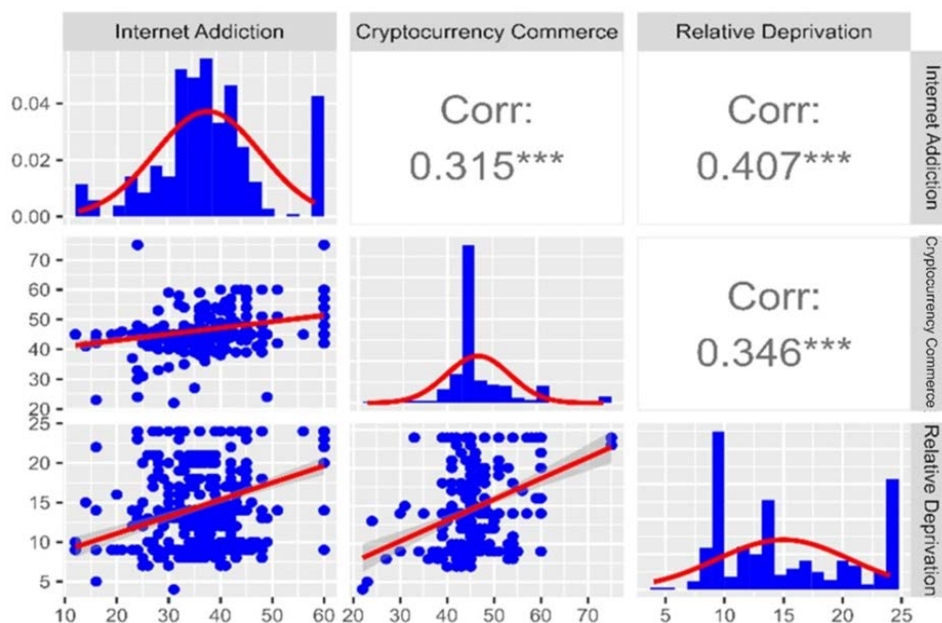


Figure 2. Distribution, interaction and correlation of internet addiction, cryptocurrency commerce and relative deprivation

Discussion

The present study found that students' internet addiction had a significant impact on their engagement in cryptocurrency trading. Specifically, our findings indicated that increased levels of internet addiction among students led to a higher likelihood of participating in cryptocurrency trading. This observation aligns with the current societal landscape, where cryptocurrency trading has gained considerable popularity, attracting a substantial and growing number of investors (Delfabbro et al. 2021, Delfabbro and King 2021). Cryptocurrencies are utilized via the internet, and the literature identified resemblances between cryptocurrency trading and internet addiction (Bulut and Menteş 2022).

This study revealed a statistically significant impact of students' relative deprivation levels on their engagement in cryptocurrency trading ($p < 0.05$). Specifically, an increase in students' relative deprivation levels corresponded to an escalation in their cryptocurrency trading activities. The reclassification of the "Substance-Related Disorders" category from DSM-IV-TR to "Substance-Related Addictive Disorders" in DSM-5 has introduced a novel perspective on substance-based addictions (APA 2013). This shift acknowledges that addiction encompasses not only the physiological and chemical effects induced by external substances or alcohol on the human psyche but also encompasses behaviors and attitudes akin to substance addictions, potentially extending to habits such as gambling, which do not necessitate the consumption of external substances but manifest patterns akin to addiction (Çakmak and Tamam 2018). In a related vein, Menteş et al. have argued that internet addiction and deprivation influence cryptocurrency usage, emphasizing the role of the deprivation sub-dimension within the scale they developed (Menteş et al. 2021).

Recent empirical evidence underscores the growing concern regarding behavioral addiction within cryptocurrency markets. A recent scoping review documented a strong overlap between cryptocurrency trading habits and traditional behavioral addictions, highlighting emotional volatility, impulsivity, and problem gambling tendencies among traders (Johnson et al. 2023). For example, a study involving healthcare professionals in Türkiye found that 8.9% of cryptocurrency traders met the criteria for gambling disorder, and problematic crypto trading correlated positively with gambling severity (Mumcu et al. 2025). Another correlational study with 487 crypto investors identified fear of missing out (FOMO) and impulsivity as key predictors of financial harm, reinforcing the addictive nature of such platforms (Mosbey et al. 2024). Additionally, clinical reports highlight significant mental health consequences associated with crypto addiction, including disrupted sleep patterns, depression, anxiety, and interpersonal conflicts (Haworth 2023). Policy discussions and media coverage, such as the warning from NHS England's chief, have drawn parallels between cryptocurrency trading addiction and gambling, recognizing it as a growing public health issue (Business Insider 2025).

Furthermore, contemporary research highlights that the structural features of cryptocurrency platforms—such as real-time price alerts, social trading feeds, and algorithm-driven recommendations—can exacerbate compulsive trading behaviors among younger and tech-savvy users. A recent scoping review across 57 studies concluded that cryptocurrency trading mimics gambling dynamics, evoking emotional distress, impulsivity, and mood instability similar to gambling disorders (Jain et al. 2025).

The present study, which determines the mediating role of relative deprivation in the effect of internet addiction on cryptocurrency trading in university students, has some limitations. Firstly, it was not possible to determine causality due to the cross-sectional design of the study. Secondly, the fact that the research data were obtained from a single university prevented generalizability to the population. Thirdly, using self-report scales, internet addiction, cryptocurrency trading and relative deprivation level are obtained. Therefore, other factors affecting internet addiction, cryptocurrency trading, and relative deprivation could not be determined.

Given the multifaceted and evolving nature of internet addiction and cryptocurrency trading, future research should consider employing longitudinal designs to establish causal inferences and better understand the developmental trajectory of these behaviors over time. Additionally, expanding the sample beyond a single university and including participants from diverse socioeconomic and cultural backgrounds would enhance the generalizability of findings. It is also recommended that future studies integrate neurocognitive assessments and behavioral experiments to explore underlying mechanisms such as impulsivity, risk perception, and reward sensitivity, which may mediate or moderate the relationship between internet addiction, relative deprivation, and trading behaviors. Furthermore, qualitative studies could offer deeper insights into the lived experiences and motivations of individuals engaging in problematic cryptocurrency trading. The findings of this study underscore the need for educational interventions and digital literacy programs aimed at fostering healthier internet use and critical awareness of financial technologies among young adults.

Conclusion

This study revealed that internet addiction has a significant direct effect on cryptocurrency trading among university students, and that this relationship is partially mediated by relative deprivation. The findings indicate that as internet addiction increases, students tend to experience greater feelings of relative deprivation, which in turn heightens their likelihood of engaging in speculative financial behaviors such as cryptocurrency trading. This triadic relationship underscores the role of psychological mechanisms—particularly perceived social and economic disadvantage—in shaping digital financial risk-taking behaviors among young adults.

These results contribute to a growing body of literature suggesting that digital behavioral addictions are not merely the product of technology overuse but are also influenced by individuals' emotional and cognitive states. In this context, cryptocurrency trading may serve as a form of psychological compensation for unmet needs or dissatisfaction, particularly among those who feel relatively deprived compared to others. Educational institutions and policymakers should take these psychosocial dynamics into account and implement preventive interventions focused on healthy internet use, emotional regulation, and critical awareness of online financial platforms. Integrating digital literacy programs and offering psychological support services could help mitigate the potential harms associated with internet overuse and risky trading behaviors.

Future research should aim to establish causal relationships through longitudinal designs and expand participant pools across diverse socioeconomic and cultural settings to enhance generalizability. Additionally, incorporating constructs such as impulsivity, fear of missing out (FOMO), and reward sensitivity may offer deeper insights into the cognitive and emotional pathways linking internet use to financial behavior. Qualitative approaches could also be valuable in exploring students' lived experiences and motivations related to cryptocurrency trading. Such efforts would contribute to the development of targeted strategies for addressing the growing intersection of digital addiction, psychological distress, and financial risk-taking in youth populations.

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