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Celebrity Worship Among Adolescents is Driven by Neuroticism, Avoidant Identity Style, and Need to Belong

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ABSTRACT

Media celebrities can exert significant influence on societal change, and adolescents are the most vulnerable population to such influence given that this is a period when personal identity-seeking starts to become increasingly important. However, there is a lack of research examining the factors that contribute to adolescents' vulnerability to celebrity worship. The present study investigated the relationship between neuroticism, avoidant identity style, and celebrity worship among adolescents with a particular focus on mediating the role of the need to belong among a convenience sample of Iranian adolescents ($N=396$; girls = 68%; age = 15.76 ± 1.99). Structural equation modeling showed that the association between avoidant identity style and celebrity worship was partially mediated by the need to belong, while the latter fully mediated the relationship between neuroticism and celebrity worship. The findings draw attention to the need to belong as an important factor underlying celebrity worship. Limitations and future directions are discussed.

Introduction

The use of social media platforms, including but not limited to *Facebook, Instagram, Twitter,* and *YouTube* (Knoll, 2016; Dwivedi et al., 2018; Shiau et al., 2017), has become increasingly popular (see Casale et al. [2023] for a review). The pervasiveness of social media has led to an extensive augmentation in the influence of media celebrities on their audience. The phenomenon of fame and celebrity culture is evident and becoming more pervasive in contemporary society (Alexander, 2010; Turner, 2010). Given that celebrities cultivate and manage their fan networks through social media platforms such as *Instagram* (sharing their personal life, photos, travel plans, etc.), it is becoming increasingly important to study celebrities' impact on their followers (Ferris, 2007).

Audiences may develop an emotional and psychological dependence on famous people, whether these celebrities are athletes, political leaders, television news readers, singers or actors (Chia & Poo, 2009). The "parasocial interaction" describes a one-way relationship in which one person possesses substantial information about another while the latter is not actively attached (Horton & Wohl, 1956; Rubin et al., 1985; Giles, 2000). However, this parasocial interaction can occasionally demonstrate a tenet of worship (Larson & Verma, 1999). A minority of individuals form delusional, one-sided relationships with their favorite celebrities, resulting in obsessions and overthinking, ultimately leading to diminished overall functioning (Maltby et al., 2003).

The Absorption Addiction Model (AAM; McCutcheon et al., 2002) was developed to explain the phenomenon of celebrity worship. According to AAM, the identity issues in some individuals may predispose them to seek validation and a sense of completeness through the admiration of celebrities. The motivational energy stemming from emotional attachment and attraction can manifest as a behavioral addiction, resulting in the adoption of excessive and potentially delusional actions to sustain the one-sided relationship. The AAM provides a framework to describe attitudes and extreme behaviors related to celebrities (parasocial relationships).

The AAM encompasses three levels (McCutcheon et al., 2002). The first level is *entertainment-social*, which represents the foundational stage and reflects social aspects and interactions with famous people. Most individuals who demonstrate a strong interest in a famous person do so because they perceive that figure as entertaining, which would lay the ground for interaction with like-minded individuals (Ashe et al., 2005). The second level is *intense-personal*, which involves the manifestation of obsessive passions and emotions containing a powerful parasocial relationship with the famous person. The third level is *borderline-pathological*, and encompasses celebrity worship in the true sense when individuals

can engage in irrational and illegal behaviors prompted by their celebrity worship (McCutcheon et al., 2004). According to prior research, individuals in levels two and three tend toward constant stalking behaviors and insist on bonding a real connection with the famous person (McCutcheon et al., 2004). Moreover, these individuals demonstrate heightened narcissistic tendencies (Ashe et al., 2005) and psychopathological symptoms (Maltby et al., 2003). They also display less cognitive flexibility and adaptive coping strategies (Maltby et al., 2004; Martin et al., 2003).

A number of studies have explored the relationship between celebrity worship and a variety of factors such as age and gender (Zsila et al., 2021; Houran et al.,2005; Maltby et al., 2005; Swami et al., 2011), personality traits (McCutcheon et al., 2021; Maltby et al., 2011; Swami et al., 2011), obsessive behaviors (McCutcheon et al., 2016; Maltby et al., 2006), self-esteem (North et al., 2007; Reeves et al., 2012), cognitive factors (Maltby et al., 2004; Martin et al., 2003; McCutcheon et al., 2012), mental health (Maltby et al., 2001; Reyes et al., 2016; Maltby & Day, 2017; Sheridan et al., 2007), peers roles (Xie, 2021), parental relationship (Cheung & Yue, 2012; Scharf & Levy, 2015; Giles & Maltby, 2004), friendship and romantic relationships (Engle & Kasser, 2005; Greenwood & Long, 2011), and poor performance on cognitive tests (McCutcheon et al., 2021). In addition to the aforementioned factors, it is essential to consider identity-seeking when examining celebrity worship among adolescents (Brown, 2015).

Identification, as conceptualized by Kelman (1958, 1961), is a process of social influence. It involves the internalization of attitudes, beliefs, and values of the object of identification by the individual who is being influenced. According to Kelman (1961, p. 63), identification occurs when an individual adopts the attitudes, values, beliefs, or behavior of another individual or group based on a 'self-defining' relationship. This means that the individual identifies with the object of identification in a way that it becomes a part of their

self-concept. Kelman (1961, p. 63), observed that when an individual internalizes the attitudes, values, and beliefs that help maintain the desired connection with the object of identification, it also leads to adopting the behavior of others (mimicking their behavior, attitudes, and beliefs).

In addition to identity styles, extant research indicates that celebrity worship is associated with specific personality traits, notably neuroticism (McCutcheon et al., 2021; McCutcheon & Lowinger, 2011; Maltby et al., 2011; Swami et al., 2011). Neuroticism encompasses a tendency to higher anxiety, hostility, depression, self-consciousness, impulsivity, and vulnerability. Individuals that possess a high level of neuroticism tend to exhibit manifestations of apprehension, tension, and heightened irritability. This provokes anger, feelings of disappointment and guilt, shame, and a sense of inferiority. Moreover, such individuals struggle to resist external pressures and experience distress, and due to heightened vulnerability, they may exhibit confusion and inflexibility (Costa & Mccrae, 1992). According to the literature, there is a positive association between neuroticism and the second (intense-personal) and third (borderline-pathological) levels of celebrity worship (Maltby et al., 2004; 2011; Maltby, McCutcheon, et al., 2011).

The literature also suggests a positive association between neuroticism and experiences of loneliness and intrapersonal difficulties (Abdellaoui et al., 2019; Dehle & Landers, 2005). This association can be understood within the framework of the need to belong theory, which posits that all individuals have a fundamental desire to establish and sustain a specific level of intrapersonal connections (Baumeister & Leary, 1995). Neuroticism and loneliness are potential factors that may drive individuals to utilize social media as a coping mechanism. This, in turn, may serve as a foundation for the development of celebrity worship, manifested through virtual relationships or parasocial interactions (Bowden-Green et al., 2021; Kraut et al., 2002; Song et al., 2014; Zsila et al., 2018).

Adolescents who exhibit an avoidant identity style may be more susceptible to developing celebrity worship due to their tendency to perceive celebrities as role models (Cohen, 2014; Ferris, 2007; Greene & Adams-Price, 1990). This susceptibility arises from their limited ability to independently direct their development of a healthy identity (Brozensky, 1990; 1994; Brozensky & Ferrari, 1996). Consequently, such adolescents may seek to fulfill their need for belonging by engaging in parasocial interactions with celebrities (Gleason et al., 2017).

The need to belong is significant issue in celebrity worship among adolescents (Cheng-Xi Aw & Labrecque, 2020; Fatima et al., 2021). According to Baumeister and Leary (1995), individuals possess an inherent inclination akin to biological drives, which induces them to begin and sustain interpersonal connections that are stable, beneficial, and meaningful. Although not all individuals have a strong and noticeable need to belong, it is essential to recognize there are those who do exhibit a strong desire to be accepted and included (Agbaria et al., 2012; Leary et al., 2013). These individuals actively cultivate numerous interpersonal connections and invest considerable effort into ensuring their acceptance and approval by others (Kelly, 2001; Leary et al., 2001). The need to belong by these individuals is a constant effort to replace new bonds when leaving previous social bonds (Agbaria et al., 2016) that can be associated with negative emotions. Research suggests that the need to belong moderates the relationship between celebrity attachment and parasocial interaction (Cheng-Xi Aw & Labrecque, 2020).

The present study

From a cultural perspective, studying celebrity worship in different cultures and languages would help to deepen the understanding of this phenomenon. A recent study by Shabhang et al. (2023) reported that Iranians (as compared to Americans) expressed a higher level of hatred toward native celebrities and their lifestyle, which was associated with humility,

personal relative deprivation, and perceived victimhood and threat. This might be due to current Iranian economic challenges and perceiving celebrities as individuals without such economic challenges. Another study by McCutcheon et al. (2020) comparing the attitude of Iranian versus American college students found that although both samples scored equally for celebrity worship, among the American sample, it was predicted hedonism and power, whereas for the Iranian sample, it was predicted by tradition and stimulation. Based on previous studies, McCutcheon et al. (2020) asserted that the younger generation of Iranians was becoming more Westernized, such as young Iranian women who through social media influence were becoming less likely to adhere to the culture of wearing a veil (Young et al., 2014). Also, it is imperative to note that to the knowledge in Iran is limited, and no previous study has ever examined the aforementioned variables using an SEM model. Given such cultural differences, the present study contributes to the understanding of cultural nuances regarding celebrity worship.

Therefore, the present study contributes to the extant literature by incorporating i.e., SEM and examines celebrity worship among the younger generation of Iran who are becoming more Westernized. Taking the aforementioned literature into account, the present study examined the importance of identity exploration in adolescence, as well as the tendency of adolescents to perceive famous people as influential figures. It also examined neuroticism and avoidant/diffuse identity style as potential risk factors in the formation of celebrity worship. Given adolescents' extensive use of the internet and virtual environments in Iran, as previous scholars have highlighted, examining the phenomenon of celebrity worship in this specific demographic is crucial (Abolfathi et al., 2022; Zsila et al., 2018). Moreover, there is little research on celebrity worship, specifically among Iranian adolescents, and given the significant increase in celebrity worship from 2001 to 2021 (McCutcheon & Aruguete, 2021), it warrants further investigation.

Therefore, the present study investigated the potential mediating role of the need to belong in adolescents' association between avoidant identity type and neuroticism with celebrity worship. It was hypothesized that the need to belong would mediate the (i) association between avoidant identity type and celebrity worship (H_1), and (ii) relationship between neuroticism and celebrity worship (H_2).

Method

Participants, procedure, and ethics

Regarding the required sample size required for SEM, there are various 'rules of thumb'. These include having a minimum sample size of 100 or 200 (Boomsma, 1982, 1985), having 10 cases per variable (Nunnally, 1967), and having 5 or 10 observations per estimated parameter (Bentler & Chou, 1987; Bollen, 1989). However, it is suggested that the number of estimated parameters, the statistical power, and the desired effect size be considered (Wolf et al., 2013). A total of 398 adolescents (272 girls [68%] and 126 boys [32%] aged from 11 to 18 years (mean age = 15.76 years [SD±1.99]) took part in an online survey. A post hoc power analysis based on statistical power (0.80), moderate effect size (0.30), number of latent variables (n=4), and the number of observed variables (n=9), suggested 341 participants was sufficient to test the hypothetical model in the present study using the online sample size calculator (Soper, 2024). Therefore, the final sample was above the recommended threshold.

The online survey was distributed by their teachers on their school's official social media. The study objectives were sent to secondary schools in Tehran and Mazandaran provinces in Iran. Two schools (one in Babol, and one in Tehran) agreed to collaborate in the study, and 15 teachers (out of 57) were given a survey link to share among their class group of students aged 11 to 18 years. Participants were requested to share the study link with other school friends who lived in Babol or Tehran (i.e., snowball sampling). Participants were assured that their data would be kept confidential, and they could leave the study at any time.

The objectives and purpose of the study were explained to parents, teachers, and participants. The present cross-sectional study adhered to the Helsinki Declaration and its subsequent amendments (World Medical Association, 2013) and received approval from the ethics committees of Alzahra University (IR.ALZAHRA.REC.1402.019)

Measures

Demographics. At the beginning of the survey, participants were asked to provide their gender, age, and the names of their favorite celebrities (as many celebrities as they wanted). The celebrities were then categorized by the research team based on their field of work (i.e., medicine, television and radio, politics, science, modeling, religion, music, literature, art, and/or sport). All participants were from Tehran and Mazandaran provinces of Iran.

Celebrity Attitude Scale (CAS). The CAS (McCutcheon et al., 2002; Persian version: Shabahang et al., 2019) was used to assess celebrity worship. The scale comprises 23 items rated on a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). It has three subscales: entertainment-social (e.g., *"My friend and I like to discuss what my favorite celebrity has done"*), intense-personal (e.g., *"When something bad happens to my favorite celebrity, I feel like it happened to me"*), and borderline-pathological (e.g., *"For me "following" my favorite celebrity is like daydreaming because it takes me away from life's hassles"*). Scores range from 23 and higher scores indicate 115. The internal consistencies in the present study for the three subscales were α = .91, α = .89, and α = .77, respectively.

The NEO Five-Factor Personality Inventory (NEO-PI-FFI) Scale. The NEO-PI-FFI (McCrae & Costa, 1985; Persian version: Garosi Farshi et al., 2001) was used to assess neuroticism. The neuroticism subscale (e.g., *"I rarely feel lonely or blue"*) comprises 12 items rated on a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores range from 12 and higher scores indicate 60. The internal consistency in the present study for the mentioned subscale was α = .73.

Identity Style Inventory (ISI). The ISI (Berzonsky, 1992; Persian version: Ghzanfari, 2003) was used to assess avoidant/diffuse identity. The avoidant identity subscale (e.g., *"I'm not sure where I'm heading in my life; I guess things will work themselves out"*) comprises 10 items rated on a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores range from 10 and higher scores indicate 50. The internal consistency in the present study for the mentioned subscale was α = .64. Although many scholars may consider an alpha of .70 to be preferable, a score above .60 is suggested as reliable by others (Hajjar, 2018; Raharjanti et al., 2022).

Need to Belong Scale (NTBS). The NTBS (Kely, 1999; Persian version: Reshvanlo et al., 2021) was used to assess the need to belong. The scale comprises 10 items (e.g., *"If other people don't seem to accept me, I don't let it bother me"*) rated on a five-point scale from 1 (*not at all*) to 5 (*extremely*). Scores range from 10 and higher scores indicate 50. The internal consistency in the present study for this scale was α = .75.

All participants were assured of the confidentiality of their data and their right to stop at any time during the data collection period. Written informed consent was provided by both the participants and their parents.

Data analysis

Data were analyzed using SPSS and Amos (version 21) and structural equation modeling (SEM) using the item-parceling method for measures lacking subscales (i.e., avoidant identity style, neuroticism, and the need to belong). The selection of the full latent SEM over path analysis, was based on the importance of consideration of measurement error in the analysis (i.e., the latent variables were assessed using psychometric scales which typically include measurement error).

Due to unknown age, two participants were removed from the analysis. Therefore, the next analysis was conducted using data from 396 participants. Before evaluating the statistical

model, the assumptions of SEM were examined and met. The skewness (ranging from -0.09 to 0.54) and kurtosis (ranging from -0.72 to 0.31) for all variables were in the range of ±3, suggesting normality. Also, multivariate normality was achieved by Mardia's test, where its statistical value with nine degrees of freedom was below the critical value of 27.88 after removing two outliers. Also, the lack of multicollinearity was confirmed with the variation inflation factor (VIF) below 7 (ranging from 1.21 to 1.67 and tolerance value above 0.01 (ranging from 0.59 to 0.81). Using a scatter plot and Pearson correlation analysis, the linear relationship between variables was also examined. It is imperative to note that three of the included measures (neuroticism, avoidant identity style, and the need to belong) were unidimensional (i.e., the scales assess a single factor), so the item parceling method was used to provide each measure with two parcels. The items with higher covariance (as recommended by modification indices of the measurement model) were parceled to form an indicator for the aforementioned latent variables.

To assess the model fit, the criteria by Hu and Bentler (1999) were used, including chi-square divided by degree of freedom ($\chi^2/df < 3$), Comparative Fit Index (CFI; > 90), Incremental Fit Index (IFI > 90), goodness of fit index (GFI > .90), Normed Fit Index (NFI >.90), root mean squared error of approximation (RMSEA < 0.08), and standardized root mean squared residual (SRMR < 0.08). To interpret the strength of the associations, Evans' (1996) guidelines were used ($r < 0.2$ very small, $r = 0.2\text{-}0.4$ small, $r = 0.4\text{-}0.6$ medium, $r = 0.6\text{-}0.8$ strong, and $r > 0.8$ very strong, and $r > 0.8$ very strong).

Results

Favorite celebrities

The sample (n=398) was classified into 11 groups in terms of favorite celebrities. For the total sample, their idolized celebrity was a famous person in acting (20.1%), medicine

(7.3%), television and radio (5%), politics (2.5%), science (4.5%), modeling (2.3%), religion (2.3%), music (35.9%), literature (5.3%), art (4.5%), and sport (14.8%). We investigated the correlation between celebrity category and severity of celebrity worship. No significant associations were found between celebrity category and severity of celebrity worship in the overall sample ($r = .05$, $p = .252$) or within males ($r = -.05$, $p = .550$) or females ($r = .11$, $p = .051$) subgroups.

Mediation analysis

Table 1 shows the mean scores and the intercorrelations between celebrity worship, avoidant identity type, neuroticism, and the need to belong. The avoidant identity style ($r = .172$, $p < 0.01$) and neuroticism ($r = .199$, $p < 0.01$) were positively and significantly associated with need to belong, and the magnitudes of the associations was very small. Also, the avoidant identity style ($r = .184$, $p < 0.01$) and neuroticism ($r = .138$, $p < 0.01$) were positively and significantly associated with celebrity worship, and the magnitudes of the associations were very small. Finally, the need to belong was positively and significantly associated with celebrity worship ($r = .217$, $p < 0.01$), and the magnitude of the observed association was small. Therefore, the higher the levels of neuroticism, need to belong, and avoidant identity style, the greater the likelihood of celebrity worship.

The fit indices for the measurement and structural models were in the acceptable range: $\chi^2/df = 2.60$, CFI = .97, IFI = .97, GFI = .96, NFI = .95, RMSEA = 0.064, and SRMR = 0.04. Figure 1 shows the study's structural model and standardized coefficients. As shown in Table 2, neuroticism ($\beta = .189$, $p = 0.01$) and avoidant identity style ($\beta = .218$, $p = 0.01$) were significantly and directly associated with the need to belong. The direct association between neuroticism and celebrity worship was not significant ($\beta = .074$, $p = 0.252$). However, avoidant identity style was significantly and directly associated with celebrity worship ($\beta = .188$, $p = 0.04$). Also, the need to belong was significantly and directly associated with celebrity worship

(β = .178, p = 0.01). The need to belong fully mediated the relationship between neuroticism and celebrity worship (β = .034, p = 0.04). Additionally, it was found that the need to belong partially mediated the relationship between avoidant identity style and celebrity worship (β = .039, p = 0.01). Overall, the predictors (neuroticism and avoidant identity style) explained 10.7% of the variance in need to belong (R^2_{adj} = .102), and the overall model explained 10.5% of the variance in celebrity worship (R^2_{adj} = .10).

Discussion

The present study investigated the potential mediating role of the need to belong in adolescents' association between avoidant identity type and neuroticism with celebrity worship. The results indicated that the need to belong fully mediated the relationship between neuroticism and celebrity worship (supporting H_2). Additionally, it was found that the need to belong partially mediated the relationship between avoidant identity type and celebrity worship (partially supporting H_1).

Neuroticism includes a tendency for anxiety, hostility, depression, self-consciousness, impulsivity, and vulnerability. Moreover, a high proportion of it manifests itself as worry, apprehension, tension, despair, guilt, inferiority complex, and inflexibility. Individuals with high neuroticism can lose their self-control ability, and their interpersonal relationships can be affected by their impulsiveness and temper (Costa & Mccrae, 1992). Individuals exhibiting elevated levels of neuroticism tend to commonly report a greater frequency of unfavorable social interactions (Lincoln et al., 2003; Russell et al., 1997; Shurgot & Knight, 2005). Individuals who exhibit emotional instability (higher neuroticism) tend to experience lower levels of satisfaction with their social support networks compared to those who possess emotional stability (Dehle & Landers, 2005; Suurmeijer et al., 2005; Tong et al., 2004; De Jong et al., 1999).

Consequently, individuals with neurotic tendencies experience challenges in establishing and maintaining positive and effective interpersonal connections. According to the need to belong theory, anxiety arises primarily from the apprehension of social rejection and abandonment, prompting individuals to possess an inherent inclination to establish and sustain stable, positive, and meaningful interpersonal connections (Baumeister & Leary, 1995). Therefore, it may be inferred that individuals with neurotic tendencies may encounter a persistent sense of unfulfilled belongingness due to inadequate interpersonal interactions.

Numerous empirical studies have consistently demonstrated a positive association between individuals exhibiting elevated levels of neuroticism and their propensity to use social media excessively (Bowden-Green et al., 2021; Malo-Cerrato et al., 2018). Individuals who experience feelings of loneliness often resort to utilizing social media platforms to compensate for their limited social skills and lack of interpersonal connections in offline face-to-face interactions (Kraut et al., 2002; Song et al., 2014). According to a study conducted by Song et al. (2014), individuals who experience elevated levels of loneliness and limited social support are more inclined to engage with social media platforms than individuals who report lower levels of loneliness and receive reliable social support. Social media platforms offer a convenient medium for individuals to track and gain insights into the personal lives of celebrities, serving as a viable means to establish parasocial interactions (Kim et al., 2019; Bräu, 2013).

According to Dollinger (1995), there is an association between adolescents' neuroticism and their preference for an avoidant identity style. Such adolescent's behavior is primarily influenced by situational circumstances and hedonic cues (Brozensky, 1990). Previous research has indicated that the avoidant-diffuse style is associated with coping mechanisms that prioritize emotions, decision-making methods that involve avoidance, situational factors, concern for others, and belief in one's abilities (Brozensky, 1990; 1994;

Brozensky & Ferrari, 1996). Research has demonstrated that celebrity worship peaks during the initial stages of adolescence (Brooks, 2021). Celebrities can be suitable role models in adolescence when individuals seek figures outside their parents to shape their identity. Consequently, the felt sense of closeness with a beloved celebrity may be associated with individuals developing their identity and achieving autonomy (Gleason et al., 2017). Adolescents exhibiting neurotic tendencies and displaying an avoidant identity style seek role models to serve as a foundation for the development of their own identity since they show an avoidant identity style and struggle to establish a cohesive identity independently. Consequently, they consistently evade engaging with tasks or responsibilities. Furthermore, the unfulfilled desire for a sense of belonging within an individual may prompt them to develop a solid and parasocial interaction with a beloved famous figure. This infatuation then assimilates the celebrity's identity, values, and objectives into their own (Brooks, 2021).

It is also important to consider sociocultural factors when interpreting the findings, as they can influence the results as potential confounders. A recent study by Khayyami et al. (2020) suggested that the need for entertainment, loss of trust in some government aspects, and celebrities' role in reflecting societal and economic wishes stimulate celebrity worship culture in Iran. This indicates that youth, who are essential contributors to Iran's future, may admire celebrities for their heroic-like role in reflecting their desires and concerns. Moreover, Soleimani Sasani et al. (2023) found that higher celebrity worship was significantly associated with a higher perception of socioeconomic inequality in Iran. The authors interpreted this finding in line with Gamson's (2011) notion regarding the elevation of the ordinary in celebrity culture. Gamson posited that in societies with high socioeconomic inequalities and where achieving material success is hard and limited, celebrity culture suggests (the false belief) that rapid wealth is attainable. Watching the lives of celebrities in media implies that vertical mobility is possible and that celebrities are examples of this possibility.

However, there is a lack of studies regarding the influence of Persian culture on other variables. It could be these economic challenges in Iran and the burden and hopelessness that it brings for Iranian youth might increase neurotic tendencies. Consequently, celebrity worship may be used by Iranian adolescents as a coping strategy to alleviate such problems. Iranians face harsh economic challenges (the average salary is approximately [US] $3000). This limits the possibility of saving money and living an independent life away from parents. Therefore, in line with compensatory internet use theory (Kardefelt-Winther, 2014), adolescents may engage in celebrity worship to compensate for their lack of opportunities (to save money, to secure a better job, to have a better life, etc.) and bond with celebrities as a way of alleviating negative mood states.

Limitations and implications

It is important to consider the limitations when interpreting research findings. The present study primarily focused on adolescents, excluding parental assessment in their reports (i.e., how parents perceived celebrity worship in their children). Consequently, it is recommended that future studies address this aspect to offer a comprehensive understanding of celebrity worship among adolescents. In addition, self-reported surveys were employed, susceptible to social desirability and recall bias. The potential overrepresentation of female participants in research studies may also limit the generalizability of findings to male individuals, therefore necessitating the inclusion of a more balanced sample in future studies. It is recommended that future research employs a mixed-method approach, encompassing both quantitative and qualitative methodologies, to gain a more comprehensive understanding of the lived experiences of adolescents who exhibit celebrity worship.

Another limitation is the small sample size, which could potentially lead to type II errors. Therefore, caution is required when interpreting the results. Additionally, since the sample only comprised Iranian adolescents, the findings may not be generalizable to other

countries due to cultural and economic differences. It is also important to note that cross-sectional correlational research cannot establish causation. Therefore, longitudinal studies are required to provide insight regarding the temporality of the findings. Moreover, although there were many significant associations between the variables but the effect sizes were very small to small.

Finally, given that the hypothetical model only explained 10% of the variance in celebrity worship, future studies may also consider other frameworks to study the phenomenon. For instance, the social comparison theory (SCT; Festinger, 1954) could enhance the understanding of celebrity worship. In accordance with SCT, an individual's personal and social worth is a result of comparing themselves to others, resulting in both upward comparison (when they feel better than others) and downward evaluation (when they feel worse than others). Consequently, celebrity worship can be viewed as an upward comparison when individuals using the use of a celebrity as a benchmark to assess their own real worth, which may also result in a greater self-image. Additionally, celebrity worship may be a way to escape insecurities by individuals immersing themselves in the lives of celebrities who seem satisfied, successful, and secure.

The results of the present study serve as a reminder of the significance of the adolescent's demand for social belonging. Adolescence for some is characterized by heightened tension and feelings of isolation, wherein the desire for social acceptance emerges as a prominent psychological demand among adolescents during this developmental stage. The intensity of this requirement is such that in the absence of adequate fulfillment within genuine interpersonal connections in an adolescent's life, parasocial interactions with celebrities will supplant those genuine interpersonal connections to fulfill this requirement. Therefore, it is imperative for parents and psychologists specializing in the domain of child and adolescent development (particularly school psychologists) to allocate greater consideration to this

significant aspect by screening for their propensity or intensity toward celebrity worship. Parents should prioritize fostering a solid and nurturing parent-child relationship to address their child's desire for belonging. By doing so, parents may effectively contribute to developing their child's self-assurance, which in turn facilitates the establishment of fruitful interpersonal connections.

Conclusion

In general, celebrity worship among adolescents may be attributed to the contribution of neuroticism and an avoidant identity style, both motivated by their need to belong. The findings of this study may help teachers and psychologists enhance the requisite awareness to effectively address this phenomenon while also providing essential training and treatment approaches for psychologists engaged in this particular area of expertise. Further investigation is necessary to prioritize examining potential therapies to facilitate the identity-seeking process among adolescents who display symptoms of celebrity worship.

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Conflicts of interest

The manuscript is derived from the Master's thesis of the first author.

Data availability statement

The data supporting the present study's findings are available upon reasonable request from the corresponding author.

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Figure 1: The structural model of the study with standardized regressions.
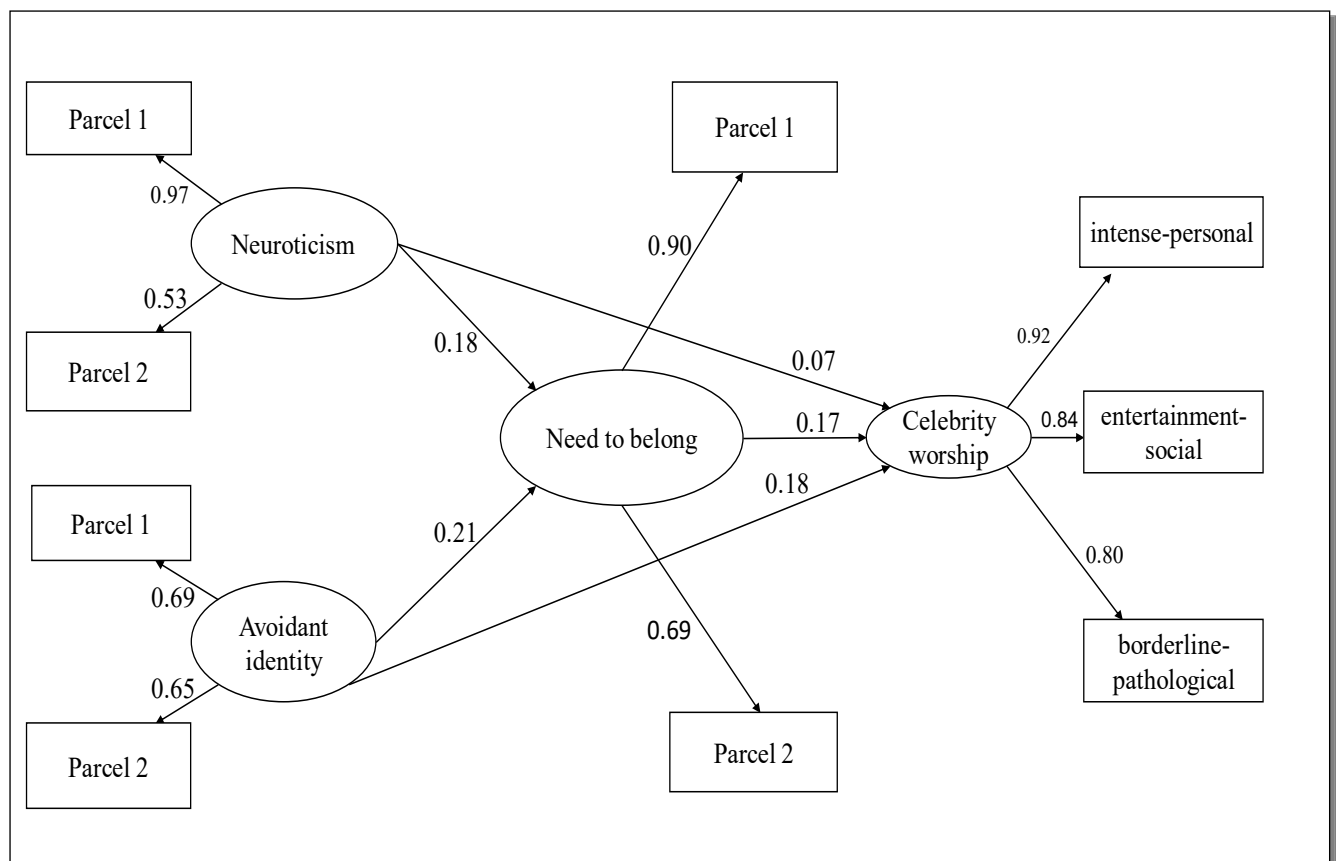
Note. Except for the direct effect of neuroticism on celebrity worship, the remaining paths are significant at $p < .05$.

Table 1: Mean, standard deviation, and correlation matrix of the studied variables.

	1	2	3	4	M	SD
1. Celebrity worship	-				64/93	20/20
2. Need to belong	0.217**	-			33/38	6/95
3. Neuroticism	0.138**	0.199**	-		26/02	7/59
4. Avoidant identity	0.184**	0.172**	0.206**	-	28/67	5/87

** $p < 0.010$ * $p < 0.05$

Table 2: Direct and indirect association between variables.

Effect	Independent variable	Mediator variable	Dependent variable	Non-standard coefficients	Standard coefficients	*p*
	Neuroticism	-	Need to belong	0.320	0.189	0.01
Direct	Neuroticism		Celebrity worship	0.335	0.074	0.25
	Avoidant identity		Need to belong	0.386	0.218	0.01
	Avoidant identity		Celebrity worship	0.892	0.188	0.04
	Need to belong		Celebrity worship	0.478	0.178	0.01
Indirect	Neuroticism	Need to belong	Celebrity worship	0.153	0.034	0.04
	Avoidant identity	Need to belong	Celebrity worship	0.184	0.039	0.02