



Who is More Authentic? A Moderator Effect of Gender Between Flow Experiences and Authenticity

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ABSTRACT

Authenticity is essential to self-awareness and self-acceptance in personal development. Researchers have attempted to underline authenticity's antecedents, but little is known about the predictive role of gender differences and flow experiences together. Authenticity and flow experiences have been widely studied in psychology, sociology, and philosophy and have profoundly impacted an individual's well-being and happiness. Since it is a multi-component concept that many areas can discuss for personal growth and self-discovery, we focused on authenticity's individual and socio-demographic antecedents. In the current study, we examined flow experiences as an individual concept that may explain authenticity and the moderator role of gender in the relations between flow experiences and authenticity. Considering the antecedents of authenticity, it is beneficial to indicate how flow experiences lead to authenticity and gender differences in it. We used the Flow State Scale and Authenticity Scale as data collection tools. We followed a cross-sectional and correlational research design. The participants consist of 310 university students (190 females and 120 males) studying at various departments of Ataturk University. Results revealed that there was a significant correlation between flow experiences and authenticity. Furthermore, regression-based moderation analysis demonstrated that flow experiences were a significant predictor of authenticity, and gender moderates the relationship between flow experiences and authenticity. Results were interpreted as grounded in positive psychology literature.

Keywords:

Authenticity, flow experiences, gender differences, emerging adulthood

1. Introduction

Authenticity describes the quality of being genuine to oneself and refers to people's ability to express their thoughts, feelings, and actions consistent with their values, beliefs, and innermost desires (Harter, 2002). Authenticity has been widely studied in psychology, sociology, and philosophy, profoundly impacting an individual's well-being and happiness (Newman, 2019). One of the main reasons is that authenticity allows individuals to form more profound and meaningful relationships with others (Theran, 2011). Authentic people can express their true selves without fear of judgment, fostering trust and intimacy in their relationships (Holden & Schrock, 2016). Additionally, since people are more likely to consider their beliefs, values, and goals when they are true to themselves, authenticity encourages self-awareness (Kernis & Goldman, 2006). As people become more self-aware, they can better understand themselves and make more intelligent life decisions (Didonato & Krueger, 2009).

Authentic individuals have high subjective and psychological well-being (Ilhan & Ozdemir, 2013; Kernis & Goldman, 2006; Kuyumcu & Kabasakaloglu, 2018; Wood et al., 2008) and self-esteem (Goldman & Kernis, 2002). They also exhibit more self-directed (Yontem & Ilhan, 2013) and autonomous behaviors (Ilhan &

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Ozdemir, 2013). However, some psychopathologies, such as lower self-esteem and higher levels of depression, have been linked to inauthenticity (Neff & Harther, 2002). Lopez and Rice (2006) found significant associations between accepting external influences, an authentic life, depression, anxiety, life satisfaction, and self-esteem. In this context, one can assume that authentic individuals have low levels of alienation from themselves, high respect for themselves, and high well-being. Therefore, since it is known that increasing positive emotions and behaviors helps to reduce negative emotions (Yalçın & Gençdoğan, 2019), it is likely that increasing authenticity, which is a positive trait, will also bring positive emotions. In this way, increasing authenticity may increase people's positive emotions and decrease their negative emotions.

Individuals must first become aware of their emotions and thoughts to increase authenticity. The second stage involves the individual being able to assess themselves positively or negatively, considering their unique characteristics. Finally, the third stage consists of acting, following their decisions, being truthful and open with others, and being true to themselves (Wood et al., 2008). From this perspective, one can assume that an individual who engages in authentic behavior has a realistic assessment of themselves and a high level of self-acceptance and awareness (Carson & Langer, 2006; Heppner & Kernis, 2007).

Research revealed that females are more authentic than males (Lopez & Rice, 2006). Authenticity literature indicates that gender factors and gender roles impact authentic behaviors (Kernis & Goldman, 2006; Lopez & Rice, 2006; Smolak & Munstertieger, 2002; Wood et al., 2008). While research findings examine the differentiation of flow experiences and authenticity according to gender, the current study differs from other studies in that it focuses on the moderating effect of gender. So this study has a different aspect from other studies because it deals with the moderator effect of gender on the relations between flow experiences and authenticity. In conclusion, it is vital to human well-being, allowing individuals to form deeper connections and promoting self-awareness and personal growth (Didonato & Krueger, 2009; Kernis & Goldman, 2006). Despite the challenges to authenticity, it is possible to cultivate a sense of authenticity by focusing on self-reflection and embracing one's true self (Harter, 2002). As a result, individuals may experience much more happiness, fulfillment, and a sense of purpose by prioritizing authenticity (Saricam, 2015). Therefore, the current study focuses on the underlying factors associated with authenticity, such as flow experiences and the moderator role of gender.

1.1. Authenticity and Flow Experiences

Flow experiences refer to a loss of self-consciousness at this moment, an intense focus on an activity, and a sense of time standing still in an engaged activity (Csikszentmihalyi et al., 2014), which bring intrinsic motivation, enjoyment, and well-being (Csikszentmihalyi et al., 2005). The flow experience has been extensively studied in psychology and shown to have a relationship with authenticity (Chhabra, 2005). Authenticity has a link between individual values and beliefs and being true to oneself (Wood et al., 2008). Authentic individuals act in ways consistent with their beliefs, values, and goals, which leads to a sense of coherence and purpose (Kernis & Goldman, 2006).

Csikszentmihalyi et al. (2005) defined flow experiences as complete absorption in an activity in which one loses a sense of self-consciousness and time. So, individuals who have a flow experience confront intense focus and engagement in an activity. The key to experiencing flow is engaging in a challenging, not overwhelming, move that is significant and engaging. When individuals experience flow, they are focused on the task at hand, losing sense of self-consciousness and time (Csikszentmihalyi et al., 2005; Csikszentmihalyi et al., 2014). Research results indicated that flow experiences are significantly correlated with well-being, life satisfaction, purpose in life (Tse et al., 2021), and cognitive function (Csikszentmihalyi et al., 2014). Additionally, flow experiences help individuals cope with negative thoughts and feelings, which lowers anxiety, stress, and depression (Mosing et al., 2018).

Although research results have demonstrated that flow experiences have a significant correlation with positive constructs, more comprehensive research should be done to underlie self-concepts such as authenticity. So, the current study focuses on the direct effect of flow experiences on authenticity and gender differences between them. To explain the relationship between flow experiences and authenticity may be complex, but one may argue that these two concepts are mutually reinforcing. Since flow experiences are more likely to occur when individuals are engaged in activities regarding their values, beliefs, and innermost

desires (Csikszentmihalyi et al., 2014), this alignment can lead to a stronger sense of purpose and a more profound sense of authenticity (Wood et al., 2008). A greater authenticity may also be reinforced by being more engaged in activities that result in flow experiences.

In flow theory, Csikszentmihalyi et al. (2014) argue that flow experiences offer a sense of self-awareness and enable individuals to better understand themselves and their values. Such self-awareness can lead to authentic behavior and help to create authenticity. Consistent with the literature knowledge, Tse et al. (2021) underlie that flow experiences and authenticity positively reinforce each other, increasing well-being, satisfaction, and fulfillment. Although the relationships between flow experiences and authenticity are complicated, these two positive concepts that contribute to personality development may be closely related to each other. In this context, Csikszentmihalyi et al. (2014) indicated that individuals tend to experience flow when engaging in activities that align with their values and beliefs, resulting in a sense of authenticity. Moreover, increased authenticity may boost flow experiences, which lead to greater well-being and fulfillment. Therefore, individuals can develop a sense of authenticity, which results in a more fulfilling and meaningful life, by giving priority to activities that result in flow experiences and are consistent with their values and beliefs.

1.2. The Moderator Role of Gender

Research findings have shown a connection between gender and authenticity, though some have found significant differences between male and female groups while others have not. Erickson and Ritter (2001) indicated no gender differences in authenticity at work. Wood et al. (2008) and Kernis and Goldman (2006) have found no significant difference in the factor structure or means across female and male groups. However, some studies revealed a complex picture when examining specific relationships. Lopez and Rice (2006) discovered that women scored significantly higher on self-reported authenticity than men in their investigation of authenticity in romantic relationships. Harter et al. (1998) found adolescent girls to be more authentic with classmates and close companions but not with their parents. Conversely, Theran (2011) discovered teenage boys are more authentic to their fathers and girls to their best friends. The study by Smolak and Munstertieger (2002) discovered that males demonstrated higher degrees of authenticity with academic professors and male classmates, but women exhibited higher levels of authenticity with female classmates. However, Simpson and Stroh (2004) demonstrated that whether men or women feel authentic at work is determined by the nature of their occupation and whether it prioritizes masculine or feminine attributes.

Additionally, the researchers have shown a distinction between gender and flow experiences, as well as variances in the frequency and intensity of flow experiences and the variables that influence gender disparities in flow experiences (Hsieh et al., 2016; Konradt et al., 2003; Sánchez-Franco, 2006; Rodriguez-Ardura & Meseguer-Artola, 2018; Shin, 2006; Yang & Quadir, 2018). So, as seen in the literature review, there has been evidence of a relationship between authenticity, flow experiences, and gender. However, some of the research results have not demonstrated that flow experiences and authenticity have gender differences. To fully comprehend the connection between these two variables and the gender moderator effect, however, more research is required. So, the current study focuses on the moderator role of gender in the relationship between flow experiences and authenticity. Research results have demonstrated that flow experiences and authenticity have gender differences. So, the current study focuses on the moderator role of gender in the relationship between flow experiences and authenticity.

1.3. The Aim of the Research and Hypotheses

Authenticity has been widely discussed and debated in various fields, including psychology, philosophy, and sociology. Authenticity refers to the quality of being honest, genuine, or trustworthy to oneself (Wood et al., 2008). Authenticity is a multicomponent and complex concept that is essential to personal growth and the self-actualization process. Since it is a multi-component concept that many areas can discuss, we focused on the individual and socio-demographic antecedents of authenticity. In the literature, it was found that there are research results addressing the differentiation of flow experiences and authenticity according to gender (Ekşi et al., 2016; Hsieh et al., 2016; Lopez & Rice, 2006; Yang & Quadir, 2018). However, no study investigating the moderator effect of gender on the predictive relations between these two variables was found. Authenticity is characterized by an individual's ability to reveal himself or herself and to be one

inside and out. Those with high levels of authenticity look at the appropriateness of a behavior for themselves. The opinions of the people around them about their behavior are secondary (Kernis & Goldman, 2006). The ability to act authentically may be higher in men than in women. Especially in collectivist cultures, women may be expected to obey more, live their emotions inside, and act in accordance with the expectations of society in line with gender roles (Kağıtçıbaşı, 2012). Men, on the other hand, are expected to show behaviors such as avoiding expressing their emotions and restricting their emotions (Wenzel & Lucas-Thompson, 2012). At the same time, it is also known that the fact that women have more relational selves than men facilitates them to behave more authentically (İmamoğlu et al., 2011). These gender-specific characteristics can be counted among the barriers and facilitating effects of authentic behavior. This situation may also be valid for flow experiences. In flow experiences, people are expected to focus on a task so much that they do not realize how time passes while doing an activity. Experiencing flow can be possible when people stay in the moment. However, an individual who tries to act according to expectations may think more about the past and the future. These can also be obstacles to flow experiences. In addition, based on the findings that flow experiences differ according to gender (Hsieh et al., 2016; Yang & Quadir, 2018), this study aimed to investigate to what extent flow experiences have a predictive effect on authenticity and whether gender has a moderating role in the predictive effect of flow experiences on authenticity.

In the current study, we focused on flow experiences as an individual concept that may explain authenticity and the moderator role of gender in the relations between flow experiences and authenticity. Research hypotheses are given as follows, and the hypothesized model is shown in Figure 1: H1: The direct effect of flow experiences on authenticity is statistically significant. H2: Gender moderates the relations between flow experiences and authenticity.

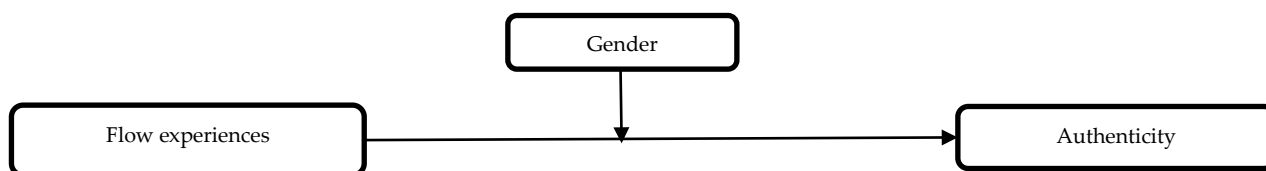


Figure 1. Hypothesized Model

2. Methodology

2.1. Research Model

This correlational study examines the relationships between flow experiences and authenticity in university students (Fraenkel et al., 2012). Relational studies aim to determine the relationships and the degree of association between at least two or more variables without trying to influence the variables (Fraenkel et al., 2012; McMillan & Schucamher, 2010; Mertens, 2015).

2.2. Research Sample

We used a convenient sampling method to determine the participants. The convenience sampling method selects the sample following conditions such as time, money, location, etc. (Özmen & Karamustafaoğlu, 2019). The Sociodemographics of the participants are given in Table 1.

Table 1. Sociodemographics of Participants (Note: N = 310)

		N	%
Gender	Female	190	61.3
	Male	120	38.7
Class	1st class	56	18.1
	2nd class	42	13.5
	3rd class	81	26.1
	4th class	131	42.3
Department	Psychological Counseling & Guidance Program	133	42.9
	Pre-school Education Program	70	22.5
	Turkish Education Program	46	14.8
	Math Education Program	40	12.9
	Social Science Education Program	21	6.7

Participants consist of 350 university students (190 females, 120 males; $M = 18.03$; $SD = 2.46$) studying in various faculties of Atatürk University in Turkey in the 2022–2023 semester.

2.3. Data Collection Tools

Flow state scale: The Flow State Scale, developed by Magyarodi et al. (2013) and adopted by Uz-Bas (2019), is to evaluate the flow experience described by Csikszentmihályi in terms of its main characteristics. These features include a challenging balance of tasks and skills and total concentration on work, ignoring other stimuli. The scale has 20 items and two factors and is of the 5-point Likert type. The first factor, Balance, consists of 11 items, and the second factor, Work Concentration, consists of 9 items. The internal consistency of the scale were .92 and .90 for the sub-dimensions, respectively.

Authenticity scale: Kernis and Goldman (2006) developed it, and Aydoğan et al. (2011) adopted it in Turkey. The Turkish version of it consists of 39 items (e.g., "It's easy for me to pretend to be someone different than I am" and "I am aware of who I am, good or bad,"). It has a Cronbach's alpha value of .85 overall. The exploratory factor analysis demonstrates four sub-dimensions of it: unbiased processing, awareness, relational orientation, and behavior. The confirmatory factor analysis results showed that the fit indexes are acceptable ($\chi^2/df = 2.22$, RMR = .07, RMSEA = .06, CFI = .92, GFI = .80, NNFI = .91). High scores indicate that students have high authenticity and personality characteristics.

2.4. Procedure

For the data collection phase, we transferred the scales to Google Forms, and sent a link to the online form to the individuals. For this, the link to the data collection tools was delivered to the individuals through the lecturers of their courses in the student information system, and they were provided with the opportunity to respond to the data collection tools. In addition, we obtained an informed consent form from the participants explaining the purpose of the study and stating that they would voluntarily participate in the study and that the results would not be shared with others.

2.5. Data Analysis

We obtained the ethical permission from the Atatürk University Educational Sciences Unit Ethics Committee before data collection. Then, the data collection tools were arranged online and delivered to the students. The student's academic advisors or the lecturer sent the link with the data collection tools via the student information system. It was ensured that the students responded to the data collection tools. Firstly, we examined the normality assumptions with univariate and multivariate normality analyses to provide the necessary prerequisites for parametric analysis. For this, we performed extreme value analysis by converting raw scores into z scores. In addition, since we determined that the kurtosis and skewness values ranged between (-1.5, 1.5), we decided that the study variables were suitable for a univariate normal distribution. The criteria proposed by Kline (2011) and Tabachnick and Fidell (2012) were considered in examining multivariate normality. In the regression model established in the multivariate normality analysis, the Mahalanobis, tolerance, and VIF values of the variables in the data set should be examined. In this context, it has been determined that no value distorts the multivariate normality, and the analysis phase has been started. Analyses were made with SPSS 24 and the Process Macro 3.5 extension.

2.6. Ethical

We obtained ethical permission from the Atatürk University Educational Sciences Unit Ethics Committee before data collection. Then, the data collection tools were arranged online and delivered to the students.

3. Findings

We performed the Pearson correlation analysis to determine the correlation between the variables. Table 2 demonstrates the correlations between variables.

Table 2. Correlations between Variables

		Authenticity	Flow experiences
Authenticity	r	1	
	p	-	
Flow experiences	r	.554**	1
	p	.000	-

Note: ** $p < .001$

Table 2 shows low and medium levels of positive and significant correlation between authenticity and flow experiences ($r = .55$).

3.2. Moderation Analysis Result

We performed a moderation analysis to indicate the moderator role of gender in the relations between authenticity and flow experiences. Moderation analysis results demonstrated that the moderator effect of gender is statistically significant. The analysis results are in Table 3 and Figure 2.

Table 3. Moderation Analysis Results

Predictor variables	B	SE	t	LLCI	ULCI
Flow experiences	.29	.32	.90	-.34	.93
Gender	-30.62*	9.70	-3.16	-49.70	-11.53
Flow experiences x Gender	.67*	.21	3.12	.25	1.09
Constant	124.04*	14.75	8.41	95.01	153.08
$R^2 = 33, F_{(3, 306)} = 49.87^*$					
Highest-order unconditional interaction					
	R ² Change			F _(1, 306)	
Flow experiences x Gender	.02			9.73*	
Moderator role of gender					
	B	SE	t	LLCI	ULCI
Gender					95% CI
Female	.96*	.14	6.84	.68	1.23
Male	1.62*	.16	10.07	1.30	1.94

Note. * $p < .001$

Table 3 demonstrates that the direct effect of flow experiences on authenticity is not significant; however, gender and the interaction between gender and flow experiences on authenticity are statistically significant. These results implied that gender is significant moderator in the relations between flow experiences and authenticity. The test of the highest-order unconditional interactions demonstrated that the interaction between flow experiences and gender has a 2% R-square change, which is statistically significant. The moderator role of gender showed that for both males and females, higher flow experiences mean higher authenticity.

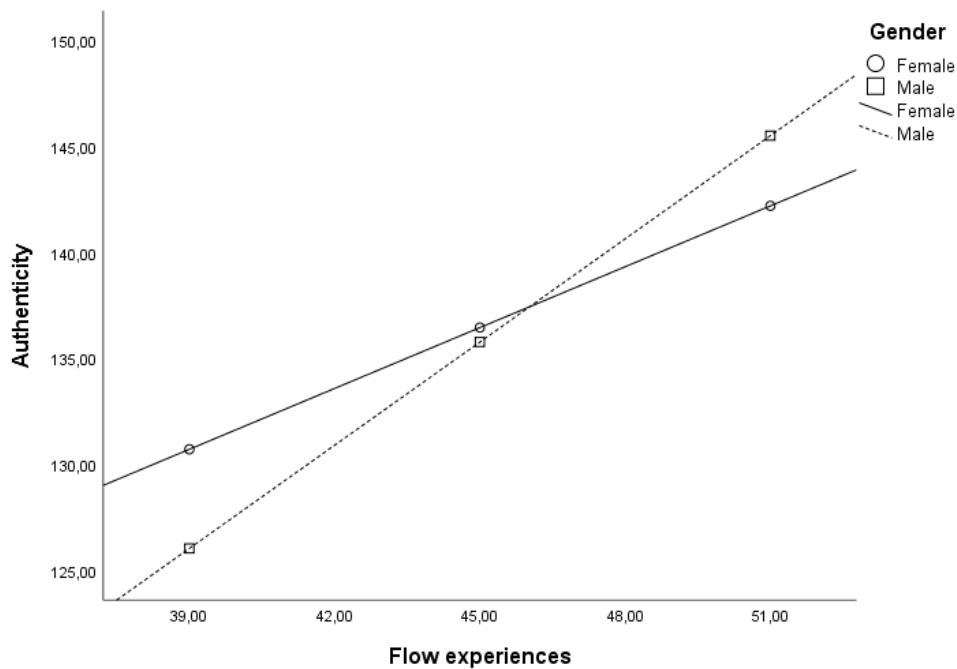


Figure 2. Moderator Effect of Gender

As demonstrated in Figure 2, the simple slope indicates that, for females, when the level of flow experiences is -1 SD (low level, 39.00), authenticity is at a minimum level. The authenticity was moderate when flow experiences were 0 SD (medium level, 45.00). Finally, authenticity is high when the level of flow experience is +1 SD (high level, 51.00). The moderation analysis result implies that the more flow experiences females have, the more authenticity they have.

As demonstrated in Figure 2, the simple slope also indicates that, for males, when the level of flow experience is -1 SD (low level, 39.00), the authenticity is at a minimum level. The authenticity was moderate when flow experiences were 0 SD (medium level, 45.00). Finally, authenticity is high when the level of flow experience is +1 SD (high level, 51.00). The moderation analysis result implies that the more flow experiences males have, the more authenticity they have. But males' authenticity levels were much higher than females in the presence of flow experiences, implying that more flow-experienced males are more authentic than females.

4. Conclusion and Discussion

The current research aimed to show the moderator effect of gender on the relations between authenticity and flow experiences. Results demonstrated that we confirmed all hypotheses. Hypothesis 2 was confirmed as the moderator effect of gender was observed to be significant in the relationship between authenticity and flow experiences. We also confirmed Hypothesis 1, examining the predictive impact of authenticity on flow experiences. These findings align with the existing literature and research body.

The significant positive relations between authenticity and flow experiences has been a research area in various fields, including psychology, management, and education. Flow is a state of concentration in an activity that results in possible experiences of skill, challenge, and enjoyment (Csikszentmihalyi et al., 2014). On the other hand, authenticity refers to being true to oneself and expressing one's unique traits, values, and beliefs (Kernis & Goldman, 2006). Research results have indicated that authenticity and flow experiences may be interrelated. To prove that relations, studies have dealt with individuals' high level of authenticity may lead to flow experience in daily activities (Lenton et al., 2016). The theoretical explanations claims that authentic individuals have a clear sense of purpose, which aids them in identifying activities that align with their values and beliefs (Wood et al., 2008). Furthermore, they may be less concerned with external validation or approval, allowing them to fully immerse themselves in the activity (Kernis & Goldman, 2006).

Authenticity literature also suggest that authentic individuals can make decisions regarding their beliefs and values. It can also contribute to a greater sense of personal agency and control in an individuals' life (Wood

et al., 2008). It can boost their ability to feel flow since they are more inclined to engage in important and pleasurable activities. Finally, the positive relationships between authenticity and flow experiences emphasize the significance of self-discovery and self-expression in living a satisfying life. Individuals who are authentic may be able to select activities that correspond with their values and beliefs, increasing their potential to feel flow. Additionally, it might give people stronger control of their lives, improving their overall quality of life. More research is required to comprehend the dynamics of this relationship and investigate how authenticity can be encouraged and improved with flow experiences or other positive psychology dynamics.

Another hypothesis is confirmed, which demonstrates the moderator effect of gender. This result is congruent with previous research results identifying flow experiences and authenticity regarding gender (Hsieh, Lin, & Hou, 2016; Lakey et al., 2008; Rodríguez-Ardura & Meseguer-Artola, 2018; Sánchez-Franco, 2006; Shin, 2006; Sohmer, 2020; Yang & Quadir, 2018). Studies have also shown that the relations between authenticity and flow experiences may vary regarding to gender (Lopez & Rice, 2006; Rodríguez-Ardura & Meseguer-Artola, 2018). Flow experiences, according to Csikszentmihalyi (2000), are universal and transcend culture, age, and gender. Some studies discovered no gender differences in flow experiences among college student samples (Martin & Cutler, 2002; Sharp et al., 2007). But some research has found that the relationship between authenticity and flow is more vital for women than men (Hsieh, Lin, & Hou, 2016; Lopez & Rice, 2006). Research results suggest that women may be more likely to experience flow when they are true to themselves and express their unique traits, values, and beliefs (Kernis & Goldman, Wood et al., 2008).

Though, this body of research indicate that this is a controversial idea, the current research results provide information about gender differences and moderator role of gender in the relations between authenticity and flow experiences. Females typically emphasize the value of relationships and personal values, which may account for this difference (Smolak & Munstertieger, 2002). When their level of authenticity increases, they might be more inclined to partake in pursuits that are consistent with their values and worldviews (Wood et al., 2008), which can heighten their experience of flow. Males, on the other hand, may place more emphasis on achievement and outside approval, which can hinder their capacity to fully immerse themselves in activity and experience flow. However, they might also be able to experience flow in their daily activities if they can harmonize their external objectives with their internal values and beliefs. The gender-positive moderator effect underlines how important it is to consider individual differences when examining the connection between authenticity and flow experiences. Females might experience flow more frequently when they are being authentic. Males may need to strike a balance between their external ambitions and their internal values and beliefs in order to feel flow. More study is required to comprehend the mechanisms underlying this association and to look into how taking individual differences into account might improve flow experiences for everyone.

5. Recommendations

The current study's findings should be viewed with some limitations. The current study's limitations are as follows:

One of the drawbacks is that the current study used a correlational and cross-sectional approach to examine the effect of gender as a moderator in the relations between flow experiences and authenticity. As a result, it can only indicate correlations between variables at a single point in time. A future study could utilize longitudinal designs to examine the temporal links between flow experiences, authenticity, and gender through time to address these constraints. Researchers could also employ experimental methods to determine causation and examine the impact of treatments on flow experiences and authenticity.

Another issue is that the study's design is constrained by self-reported data, which is susceptible to social desirability bias. Finally, objective measures, such as physiological data, could supplement self-reported data and provide more accurate measurements of flow experiences and authenticity. Since authenticity is a concept related to the individual's personality development process, it can be examined for individuals in a developmental period such as adolescence, when identity development begins to take shape. So, the relationship between flow experiences and authenticity can be evaluated for different developmental periods such as adolescent or adulthood.

The fact that the number of female participants in the current study was higher than the number of male participants can be considered a limitation. In future studies, more male participants can be reached. Flow experiences are analyzed as three-channel, four-channel, and eight-channel according to the flow theory. New structural models can be designed in accordance with these models.

Future studies could explore the relationship between flow experiences and authenticity by looking at moderator variables like age, gender roles, or cultural background. Further research into the mechanisms underlying the connection between authentic experiences and flow would also contribute to a more thorough understanding of the relations between the two concepts. Lastly, researchers could explore the potential applications of the findings in practical settings, such as educational or workplace settings, where flow experiences and authenticity may be essential factors in promoting well-being and success.

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