



## Adverse Childhood Experiences and Social Media Addiction

Maryam Chegeni<sup>1,2</sup>, Nouzar Nakhaee<sup>3</sup>, Negar Sangsefidi<sup>4</sup>, Shakila Zarrinmegar<sup>5</sup>, Zahra Khorrami<sup>6</sup>, Parvin Mangolian Shahrababaki<sup>7</sup>, Mahin Eslami Shahrababaki<sup>8</sup>,  
\*Ali Akbar Haghdoost<sup>9</sup>

1. Department of Public Health, Khomein University of Medical Sciences, Khomein, Iran

2. Molecular and Medicine Research Center, Khomein University of Medical Sciences, Khomein, Iran

3. Neuroscience Research Center, Institute of Neuropharmacology, Kerman University of Medical Sciences, Kerman, Iran

4. Department of Biostatistics, Faculty of Health, Mashhad University of Medical Sciences, Mashhad, Iran

5. Department of Clinical Psychology, School of Behavioral Sciences and Mental Health, Iran University of Medical Sciences and Health Services, Tehran, Iran

6. Ophthalmic Epidemiology Research Center, Research Institute for Ophthalmology and Vision Science, Shahid Beheshti University of Medical Sciences, Tehran, Iran

7. Nursing Research Center, Kerman University of Medical Sciences, Kerman, Iran

8. Department of Psychiatry, Neuroscience Research Center, Institute of Neuropharmacology, Kerman University of Medical Sciences, Kerman, Iran

9. Modeling in Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

\*Corresponding Author: Email: ahaghdoost@gmail.com

(Received 19 Jul 2025; accepted 28 Oct 2025)

### Abstract

**Background:** Adverse childhood experiences (ACEs) are linked to various behavioral and psychological issues. This study explored the relationship between ACEs and social media addiction (SMA), examining the mediating role of quality of life (QoL) and the moderating effect of occupational status.

**Methods:** Overall, 1,247 adults (55.4% females), aged 19 to 65 yr, were recruited through convenience sampling in Kerman, southeast Iran. Validated Persian versions of the ACE-ASF, WHOQOL-BREF, and Bergen Social Media Addiction Scale were used. Structural equation modeling (PLS-SEM) assessed direct, indirect, and moderated pathways.

**Results:** ACEs were significantly associated with higher SMA ( $\beta=0.088$ ,  $P=0.002$ ) and lower QoL ( $\beta = -0.234$ ,  $P<0.001$ ). QoL was inversely related to SMA ( $\beta = -0.225$ ,  $P<0.001$ ), and partially mediated the ACE–SMA relationship ( $\beta=0.053$ ,  $P < 0.001$ ). Occupational status moderated the effects of ACEs on both QoL ( $\beta=0.066$ ,  $P=0.021$ ) and SMA ( $\beta= -0.055$ ,  $P=0.046$ ). Higher job levels reduced adverse effects. However, no significant moderation was found in the QoL–SMA path.

**Conclusion:** ACEs significantly increase the risk of SMA, partly through reduced QoL. Improving occupational status and QoL can reduce the long-term behavioral effects of childhood adversity.

**Keywords:** Adverse childhood experiences; Social media addiction; Quality of life; Occupation; Structural equation modeling; Iranian population



## Introduction

With increased access to the internet, excessive use of social media has become a growing public health concern (1). In 2021, social media usage rates were reported at 69%, 81%, and between 13% to 40% across different populations (2). Over 210 million people worldwide suffer from SMA (3). SMA is a hidden behavioral addiction characterized by a maladaptive psychological dependence on social platforms, leading to symptoms similar to those seen in other addictive behaviors (4). Beyond the addiction risk, excessive use of social media has been linked to poor academic and occupational performance, sleep disturbances, and mental health problems such as anxiety and depression (5).

Childhood experiences significantly influence long-term mental health. ACEs include various forms of trauma occurring before the age of 18, including emotional, physical, and sexual abuse, neglect, and socioeconomic problems. These may also involve the loss of a close family member (6). ACEs are associated with both physical and psychological health problems (7) and increased vulnerability to addictive behaviors (8). Individuals with a history of substance abuse or gambling often report more childhood adversities, highlighting the role of ACEs in behavioral addictions (9). ACE is also associated with problematic social media use, characterized by a reduced ability to regulate use (10). A meta-analysis of 45,364 participants from 12 countries showed a positive and significant correlation between ACEs and Internet addiction (11). Previous research has identified several mediators in the association between ACEs and high-risk behaviors, including problematic digital behaviors (12). In China, childhood abuse leads to smartphone addiction through increased neuroticism and poor coping (13). However, the mediating role of QoL has received limited attention.

QoL is defined as "people's perception of their position in life within the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards, and

concerns" (14). ACEs negatively impact QoL, increasing risks for PTSD, depression, and anxiety (15, 16). These factors increase risky behaviors (17). Similarly, excessive social media use has been linked to reduced QoL and increased depressive symptoms (18). Extensive use of social media is increasingly linked to social, psychological, and health challenges, especially in communities with lower life satisfaction (19, 20). Individuals with lower life satisfaction tend to exhibit more addictive social media behaviors (3, 21). QoL is linked to internet addiction, SMA, and ACEs. This study examines QoL as a mediator in these relationships.

Another important factor influencing behavioral health is occupational status. Stable employment is associated with improved mental and physical well-being. Occupational therapy-based interventions have been effective in treating addiction by increasing social interaction, self-esteem, and personal responsibility (22, 23). However, certain groups such as young or dissatisfied healthcare professionals are at higher risk for SMA due to factors such as burnout and job-related stress (24). Occupational imbalance has been inversely related to problematic internet use (25). Furthermore, ACEs can undermine occupational performance later in life, through emotional dysregulation and increased vulnerability to interpersonal difficulties or substance abuse (26).

Despite the wide scope of literature on ACEs and behavioral addiction, limited studies have explored the mediating role of QoL and the moderating effect of occupation in the link between ACEs and SMA. This study aimed to address this gap in the literature by examining these relationships in an Iranian adult population

## Methods

### *Participants and Setting*

The present study was conducted in Kerman, a city located in southeast Iran. Kerman Province has a population of 3.4 million and is the largest province in Iran. It also has a moderate socioec-

onomic status, and 85.4% of its residents are literate (27).

### ***Sampling***

The participants in this study were selected from visitors to the hospitals in Kerman. The sampling method used was convenience sampling. The sample consisted of 1247 persons (19-65 yr old) accompanying patients in private and public hospitals in Kerman, selected as the participants in the research sample. The participants were not patients.

### ***Data gathering***

At first, the age of over 18 yr and the consent of participants to complete the questionnaire were considered as the inclusion criteria. The data were collected anonymously, and the sealed ballot box method was applied to ensure the confidentiality of the participants' information. We used self-administered questions instead of interviews. The questions were answered by participants, and there was no specific time limit.

### ***Measures***

#### ***Adverse Childhood Experiences***

International Adverse Childhood Experiences Abuse Short Form (ACE-ASF) was used to measure physical-emotional and sexual abuse (28), each being measured with 4 items. All of the 8 items are about the experiences of the first 18 yr of life. Good psychometric properties were reported for this self-report instrument among Iranian samples (28). Moreover, in this study, the participants were asked to report their adverse experiences before the age of 18, and therefore a specific age group was considered in this study and the effect of age was controlled.

#### ***World Health Organization Quality of Life-BREF (WHOQOL-BREF)***

This questionnaire was used to measure the QoL. It consists of 26 comprehensive items and four dimensions of health, including physical health (seven items), psychological health (six items), social health (three items), and environmental health (eight items) (29). This scale is a valid and

reliable measurement of subjective QoL among Iranian adults (30).

#### ***Bergen Social Media Addiction Scale (BSMAS)***

SMA was assessed by the Bergen Social Media Addiction Scale (BSMAS) proposed by Griffiths to assess the experience of using social media over the last year (31). This self-report scale was previously adopted by the Iranian population. Good validity and reliability properties in the Persian language were reported among Iranian samples (32). Besides, a higher BSMAS score indicates a stronger addiction to social media, and a BSMAS score over 19 indicates the respondent is at risk of developing problematic social media use (33).

### ***Data Analysis***

The data analysis was conducted in two phases: descriptive statistics for participant characteristics and PLS-SEM for testing variable relationships. The measurement model was assessed for reliability (composite reliability), convergent validity (AVE), and discriminant validity (cross-loadings, Fornell-Larcker, HTMT). Indicator collinearity was checked using VIF (35, 36). Model performance was evaluated using  $R^2$ ,  $f^2$ ,  $Q^2$ , and SRMR. Indirect effects with 95% confidence intervals were tested via bias-corrected bootstrapping (37). All analyses were performed using SPSS 16.0 for preliminary analysis and SmartPLS 3.0 for SEM.

### ***Ethics approval***

This study was approved by the Ethics Committee of Kerman University of Medical Sciences (Approval No. IR.KMU.REC.1397.338). Data was collected anonymously using a sealed ballot box to maintain confidentiality. Participants gave verbal informed consent before participating in the study.

## Results

### *In short and in simple language*

The study reveals a complex interaction between ACEs, QoL, and SMA. ACEs increase SMA while negatively impacting QoL, and QoL partially mediates the relationship between ACEs and SMA. Occupational status moderates the effects of ACEs on both QoL and SMA, with stronger negative impacts at lower employment levels. However, occupational status does not significantly moderate the pathway from QoL to SMA.

### *Descriptive Characteristics of the Participants*

The study included 1,247 participants with a mean age of  $31.9 \pm 8.7$  yr. Most participants (77.4%) were not addicted to social media. Men (50.7%) showed a higher tendency for addiction than women. 33.3% reported sexual abuse, while 62.6% experienced physical-emotional abuse. Most addicted individuals (70.2%) had a history of physical-emotional abuse (Table 1).

**Table 1:** Descriptive statistics for the participants' demographic data

Variables	Social Media Addiction		Total (1247)	Statistic (P-value)	
	No (n=965)	Yes(n=282)			
Age (yr)	32.8±8.8	28.9±7.5	31.9±8.7	7.3†***(<0.001)	
Gender					
Male	413(42.8%)	143(50.7%)	556(44.6%)	5.5†* (0.019)	
Female	552(57.2%)	139(49.3%)	691(55.4%)		
Education					
Illiterate(no formal education)	4(0.4%)	1(0.4%)	5(0.4%)	3.3‡ (0.761)	
Primary school	19(2.0%)	4(1.4%)	23(1.8%)		
High school	87(9.0%)	31(11.0%)	118(9.5%)		
Diploma	345(35.8%)	92(32.6%)	437(35.0%)		
Associate's degree	122(12.6%)	39(13.8%)	161(12.9%)		
Bachelor's degree	291(30.2%)	92(32.6%)	383(30.7%)		
Postgraduate	97(10.1%)	23(8.2%)	120(9.6%)		
Occupation					
Civil servant	114(11.8%)	29(10.3%)	143(11.5%)	26.1‡***(<0.001)	
Private sector employee	80(8.3%)	23(8.2%)	103(8.3%)		
Self-employed	294(30.5%)	97(34.4%)	391(31.4%)		
Student	104(10.8%)	52(18.4%)	156(12.5%)		
Housewife	276(28.6%)	50(17.7%)	326(26.1%)		
Retired	17(1.8%)	1(0.4%)	18(1.4%)		
Unemployment (able to work)	74(7.7%)	27(9.6%)	101(8.1%)		
Unemployment (unable to work)	6(0.6%)	3(1.1%)	9(0.7%)		
Social Media Use					
Yes	817(84.7%)	282(100%)	1099(88.1%)		49.0‡***(<0.001)
No	148(15.3%)	0(0.0%)	148(11.9%)		
Adverse Childhood Experiences					
Sexual abuse					
Yes	300(31.1%)	115(40.8%)	415(33.3%)	9.2‡***(0.002)	
No	665(68.9%)	167(59.2%)	832(66.7%)		
Physical-emotional abuse					
Yes	583(60.4%)	198(70.2%)	781(62.6%)	8.9‡***(0.003)	
No	382(39.6%)	84(29.8%)	466(37.4%)		
Quality of Life Score					
Physical	14.8±2.4	14.0±2.4	14.6±2.4	5.1†***(<0.001)	
Psychological	13.5±2.8	12.2±3.1	13.2±2.9	6.1†***(<0.001)	
Social	13.9±3.2	12.8±3.5	13.6±3.3	4.7†***(<0.001)	
Environmental	13.2±2.6	12.6±2.8	13.0±2.6	3.3†***(<0.001)	

‡  $\chi^2$  statistic; † t statistic; \* $P \leq .05$ , \*\* $P \leq .01$ , \*\*\* $P \leq .001$ .

**Structural Equation Modeling Measurement Model**

The measurement model demonstrated satisfactory reliability and validity. All indicators showed significant loadings above 0.40, and composite reliability values exceeded 0.70. VIF values were

below 5, indicating no multicollinearity. Convergent validity was supported, except for social media addiction (AVE = 0.398) (Table 2). Discriminant validity was confirmed through cross-loadings, the Fornell-Larcker criterion, and HTMT values (all below 0.90) (Table 3).

**Table 2:** Summary of the measurement model assessment: standardized factor loadings, reliability, and convergent validity estimates

Construct	Item	Loading	STDEV	t-value	P-value	VIF	CR	AVE
Adverse Childhood Experiences (ACEs)	Sexual abuse	0.548***	0.081	6.727	<0.001	1.038	0.720	0.578
	Physical-emotional abuse	0.925***	0.033	27.881	<0.001	1.038		
Quality of Life (QoL)	Physical	0.809***	0.015	53.656	<0.001	1.857	0.885	0.658
	Psychological	0.880***	0.009	98.581	<0.001	2.234		
	Social	0.760***	0.018	42.545	<0.001	1.575		
	Environmental	0.790***	0.017	45.974	<0.001	1.678		
Social Media Addiction (SMA)	Q*breakdown	0.807***	0.014	56.447	<0.001	1.610	0.795	0.398
	Q*forgetting	0.575***	0.036	16.191	<0.001	1.175		
	Q*need	0.652***	0.032	20.630	<0.001	1.434		
	Q*planning	0.497***	0.041	12.001	<0.001	1.218		
	Q*try	0.533***	0.035	15.126	<0.001	1.218		
	Q*work	0.673***	0.025	26.712	<0.001	1.259		

Abbreviations: STDEV, Standard Deviation; VIF, Variance Inflation Factor; CR, Composite Reliability; AVE, Average Variance Extracted. Q\*: Question; Questions one to six in the social media addiction questionnaire. The outer loadings > 0.4, CR > 0.7, AVE > 0.5. All VIF values were below the threshold of 5; \*\*\* P ≤ .001.

**Table 3:** Discriminant Validity Criteria

Criteria	Item	Constructs			
		ACE	QoL	SMA	Job
Cross-Loadings	Sexual abuse	0.548	-0.078	0.105	0.054
	Physical abuse	0.925	-0.240	0.123	-0.067
	Physical	-0.139	0.809	-0.175	0.177
	Psychological	-0.179	0.880	-0.245	0.172
	Social	-0.225	0.760	-0.145	0.092
	Environmental	-0.228	0.790	-0.136	0.109
	Q*breakdown	0.133	-0.159	0.807	0.044
	Q*forgetting	0.077	-0.231	0.575	-0.059
	Q*need	0.059	-0.045	0.652	0.104
	Q*planning	0.062	-0.007	0.497	0.039
	Q*try	0.109	-0.169	0.533	-0.038
	Q*work	0.100	-0.170	0.673	0.013
	Job	-0.036	0.172	0.027	1.000
Fornell-Larcker & HTMT	ACE	0.761	0.408	0.309	0.139
	QoL	-0.235	0.811	0.277	0.187
	SMA	0.145	-0.221	0.631	0.094
	Job	-0.036	0.172	0.027	1.000

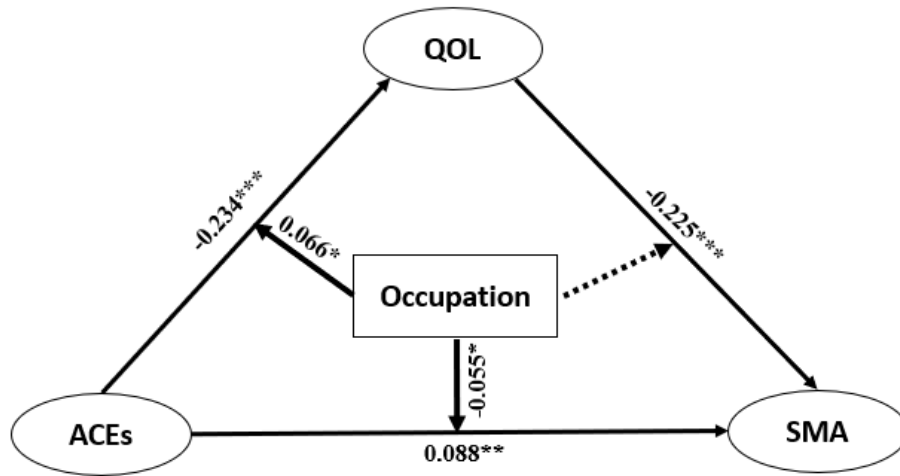
Abbreviations: ACEs, Adverse Childhood Experiences; QoL, Quality of Life; SMA, Social Media Addiction; HTMT, Heterotrait-Monotrait Ratio: Upper triangular matrix (The green values); Fornell-Larcker: Lower triangular matrix (the blue values).



**Structural Model**

ACEs had a significant positive direct effect on SMA and a significant negative 0 direct effect on QoL. QoL negatively affected SMA and significantly mediated a positive relationship between ACEs and SMA. Occupational status moderated

these relationships, significantly influencing both the ACEs-QoL and ACEs-SMA pathways (Fig. 1). The impact of ACEs varied by employment level. The R<sup>2</sup> change of 0.015 indicated a 1.5% increase in variance explained for QoL by adding the interaction term (Table 4).



**Fig. 1:** The moderated mediation model controlling age and gender

Note: Adverse Childhood Experiences (ACEs); Quality of Life (QoL); Social Media Addiction (SMA); The numbers on the arrows represent path coefficients; The solid arrows depict significant relationships; The dotted arrow represents a non-significant moderating effect of occupation on the QoL–SMA path; The asterisks indicate significance levels (\* P≤ .05, \*\* P≤ .01, \*\*\* P≤ .001)

**Table 4:** Hypotheses of the moderated mediation model

Effects	Relations	Coefficient	STDEV	t-value	P-value	95% Confidence interval	Decision
Direct QoL	ACEs	-0.234***	0.027	8.711	<0.001	(-0.289,-0.184)	Accepted
	Age	-0.058*	0.027	2.132	0.031	(-0.111,-0.004)	Accepted
	Gender	-0.033	0.030	1.103	0.256	(-0.090,0.026)	Rejected
	Occupation	0.158***	0.029	5.378	<0.001	(0.101, 0.216)	Accepted
	R <sup>2</sup> change	0.015					
SMA	ACEs	0.088**	0.028	3.129	0.002	(0.034,0.142)	Accepted
	QoL	-0.225***	0.032	7.011	<0.001	(-0.289,-0.162)	Accepted
	Age	-0.288***	0.025	11.741	<0.001	(-0.337,-0.241)	Accepted
	Gender	-0.088**	0.029	2.985	0.002	(-0.146,-0.030)	Accepted
	Occupation	0.071*	0.028	2.564	0.010	(0.018, 0.127)	Accepted
	R <sup>2</sup> change	0.011					
Moderating	ACEs* Occupation>QoL	0.066*	0.029	2.311	0.021	(0.011,0.123)	Accepted
	ACEs* Occupation>SMA	-0.055*	0.028	1.984	0.046	(-0.111,-0.0004)	Accepted
	QoL* Occupation>SMA	-0.001	0.043	0.023	0.982	(-0.059, 0.059)	Rejected
Mediating	ACEs> QoL>SMA	0.053***	0.010	5.427	<0.001	(0.035,0.074)	Accepted

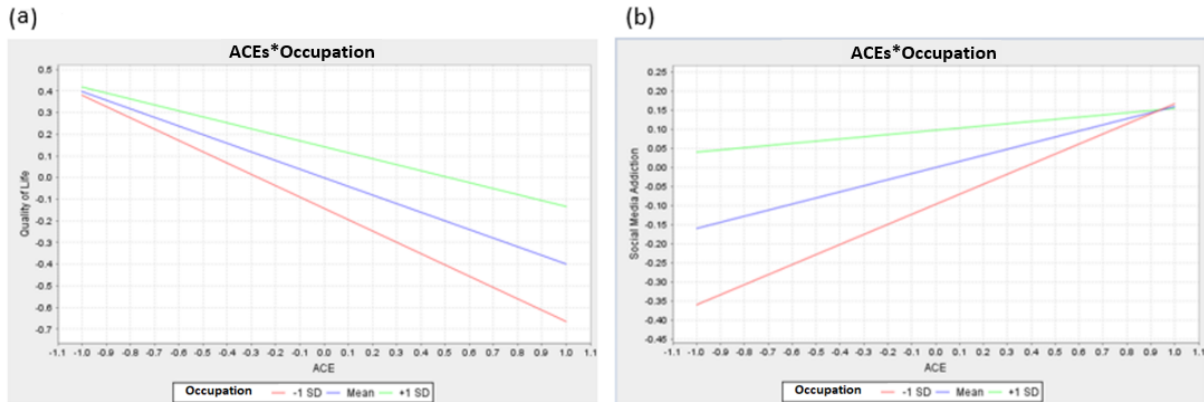
Adj. R<sup>2</sup> (SMA): 0.238; Adj. R<sup>2</sup> (QoL): 0.197; SRMR: 0.074

Abbreviations: ACEs, Adverse Childhood Experiences; QoL, Quality of Life; SMA, Social Media Addiction.

\* P≤ .05, \*\* P≤ .01, \*\*\* P≤ .001

Fig. 2 visually confirms that higher employment attenuated the negative effect of ACEs on QoL

and the positive effect on SMA, while lower employment intensified both associations.



**Fig. 2:** Simple slope plots demonstrating the moderating effect of occupation on the relationships between adverse childhood experiences (ACEs) and (a) quality of life (QoL) and (b) social media addiction (SMA)

Note: In both panels, the x-axis represents ACEs and the y-axis shows the outcome variable (QoL or SMA). The three lines indicate different levels of occupational status: blue (mean), SD refers to one standard deviation above (+1 SD, green) or below (-1 SD, red) the mean level of occupational status. The plots visually confirm that occupational status moderates the effects of ACEs on both QoL and SMA, such that lower occupational status intensifies these relationships

## Discussion

The findings indicate a significant direct and indirect relationship between ACEs and SMA. ACEs increase SMA risk while negatively affecting QoL. Additionally, lower QoL is associated with higher levels of SMA, confirming its mediating role in this relationship. Occupational status moderates these effects, with higher employment levels weakening the impact of ACEs on QoL and SMA, while lower employment levels strengthen this association.

### *The relationship between ACEs and SMA*

The positive and significant association between ACE and SMA confirms that ACE increases the likelihood of developing behavioral addictions, including problematic social media use (34). Previous studies have shown that individuals exposed to emotional, physical, or sexual abuse are more prone to social media overuse (10), especially when these experiences affect emotional development and attachment styles. Maladaptive

attachment and depression mediate the relationship between childhood maltreatment and SMA, demonstrating a pattern of emotion regulation through online interaction.

Wang et al. highlighted the role of low self-esteem and distorted cognitions of social networks in adolescents with parental conflict, emphasizing broader psychological vulnerabilities (12). Kircaburun et al. considered body image dissatisfaction as a mediator between emotional abuse and problematic use of social media and emphasized the role of early trauma in shaping self-concept and coping strategies (35).

Neurobiologically, ACEs alter structures of emotion regulation, stress response, and reward pathways, which are also implicated in SMA (36). These disruptions may promote compulsive behavior and reinforce maladaptive online coping mechanisms.

### *The mediating role of QoL*

Our findings demonstrate that lower QoL significantly mediates the association between ACEs

and SMA. ACEs increase the risk of SMA by reducing QoL and life satisfaction (37). Furthermore, Sun & Zhang and Dam et al. emphasize how poor QoL (including psychological distress and social functioning impairments) can drive maladaptive coping behaviors like SMA (4, 18). Similarly, Longstreet & Brooks highlighted life satisfaction as a protective factor against internet-related addictions (3).

### *The moderating role of occupation*

Our findings demonstrate that occupational status significantly moderates the impact of ACEs on both QoL and SMA. Individuals with stable jobs or higher job status had fewer negative effects of ACEs and a lower risk of SMA, a finding consistent with Chegeni et al. and Topitz et al. on the protective role of employment (34, 38). Consistent with broader literature, employment provides structure, social engagement, and a sense of agency that can counteract the detrimental effects of early adversity. Yet, our findings show that employment status does not moderate the QoL-SMA pathway; although employment protects against external stress, it is not sufficient to reduce psychological distress and emotional dysregulation caused by childhood trauma that contribute to SMA.

Finally, problematic use of social media is associated with burnout and decreased occupational performance (39), therefore occupational status plays a role as an important moderator in the interaction between ACE and SMA.

### *Limitations*

Limitations of the study include cross-sectional design (impossible to draw causal conclusions), convenience sampling from a single region (reduced generalizability), use of self-report data (potential for bias), failure to control for important factors such as socioeconomic status and mental health, and the impact of cultural differences. Future longitudinal studies with more control variables and examination of other mediators should be conducted to better understand the association between ACEs and SMA.

## Conclusion

ACEs reduce quality of life and increase the risk of SMA, but higher occupational levels moderates these effects and helps reduce the consequences.

Interventions should enhance resilience and reduce the risk of SMA in individuals with adverse childhood experiences by strengthening mental health and occupational support.

## Journalism Ethics considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

## Acknowledgements

We are thankful to the Kerman University of Medical Science, which supported the study. The research team would also like to thank the people who contributed to this research.

## Conflict of interest

The authors declare that there is no conflict of interests.

## References

1. Andreassen CS (2015). Online Social Network Site Addiction: A Comprehensive Review. *Curr Addict Rep*, 2(2): 175-184.
2. Smith A, Anderson M (2018). Social Media Use in 2018. Pew Research Center. Available from: <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/> [Last accessed on 2018 May 20].
3. Longstreet P, Brooks S (2017). Life satisfaction: A key to managing internet & social media addiction. *Technol Soc*, 50: 73-77.
4. Sun Y, Zhang Y (2021). A review of theories and models applied in studies of social media ad-



- diction and implications for future research. *Addict Behav*, 114: 106699.
5. Kolhar M, Kazi RNA, Alameen A (2021). Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi J Biol Sci*, 28(4): 2216-2222.
  6. Li W, Zhang X, Chu M, Li G (2020). The impact of adverse childhood experiences on mobile phone addiction in Chinese college students: A serial multiple mediator model. *Front Psychol*, 11: 834.
  7. Hughes K, Bellis MA, Hardcastle KA, et al. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*, 2(8): e356-e366.
  8. Brand M, Wegmann E, Stark R, Müller A, Wölfling K, Robbins TW, et al. (2019). The Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive behaviors: Update, generalization to addictive behaviors beyond internet-use disorders, and specification of the process character of addictive behaviors. *Neurosci Biobehav Rev*, 104: 1-10.
  9. Zilberman N, Yadid G, Efrati Y, Rassovsky Y (2019). Negative and positive life events and their relation to substance and behavioral addictions. *Drug Alcohol Depend*, 204: 107562.
  10. Worsley JD, McIntyre JC, Bental RP, Corcoran R (2018). Childhood maltreatment and problematic social media use: The role of attachment and depression. *Psychiatry Res*, 267: 88-93.
  11. Hao F, Li P, Liang Z, Geng J (2024). The association between childhood adverse experiences and internet addiction: A meta-analysis. *Acta Psychol (Amst)*, 246: 104270.
  12. Wang M, Xu Q, He N (2021). Perceived interparental conflict and problematic social media use among Chinese adolescents: The mediating roles of self-esteem and maladaptive cognition toward social network sites. *Addict Behav*, 112: 106601.
  13. Chen D, Lin L, Feng X, Luo S, Xiang H, Qin K, et al. (2023). Adverse childhood experiences, problematic internet use, and health-related quality of life in Chinese adolescents. *Eur J Psychotraumatol*, 14(2): 2218248.
  14. The WHOQOL Group (1995). The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. *Soc Sci Med*, 41(10): 1403-1409.
  15. Cohrdes C, Mauz E (2020). Self-efficacy and emotional stability buffer negative effects of adverse childhood experiences on young adult health-related quality of life. *J Adolesc Health*, 67(1): 93-100.
  16. Nelson S, Beveridge JK, Mychasiuk R, Noel M (2021). Adverse childhood experiences (ACEs) and internalizing mental health, pain, and quality of life in youth with chronic pain: a longitudinal examination. *J Pain*, 22(10):1210-1220.
  17. Jia H, Lubetkin EI (2020). Impact of adverse childhood experiences on quality-adjusted life expectancy in the US population. *Child Abuse Negl*, 102: 104418.
  18. Dam VAT, Dao NG, Nguyen DC, et al. (2023). Quality of life and mental health of adolescents: Relationships with social media addiction, Fear of Missing out, and stress associated with neglect and negative reactions by online peers. *PLoS One*, 18(6): e0286766.
  19. Gnapika M, Kour B, Dadhwal A, Ranjan R (2022). Effect of Social Media Addiction on Aggression and Overall Quality of Life on Undergraduate Students. *Neuroquantology*, 20(17): 1418-1425.
  20. Cheng C, Li AY-l (2014). Internet addiction prevalence and quality of (real) life: A meta-analysis of 31 nations across seven world regions. *Cyberpsychol Behav Soc Netw*, 17(12): 755-760.
  21. Koçak O, İlme E, Younis MZ (2021). Mediating role of satisfaction with life in the effect of self-esteem and education on social media addiction in Turkey. *Sustainability*, 13(16): 9097.
  22. Rojo-Mota G, Pedrero-Pérez EJ, Huertas-Hoyas E (2017). Systematic review of occupational therapy in the treatment of addiction: Models, practice, and qualitative and quantitative research. *Am J Occup Ther*, 71(5): 7105100030p1-7105100030p11.
  23. Wilburn VG, Huber ME, Senter D, Stoll HB (2022). Considerations for occupational therapists in developing community-level interventions for youth with high adverse childhood experiences (ACEs). *The Open Journal of Occupational Therapy*, 10(1): 1-7.

24. Luo A, Kong W, He H, Li Y, Xie W (2022). Status and influencing factors of social media addiction in Chinese medical care professionals: a cross-sectional survey. *Front Psychol*, 13: 888714.
25. Romero-Tébar A, Rodríguez-Hernández M, Segura-Fragoso A, Cantero-Garlito PA (2021). Analysis of occupational balance and its relation to problematic internet use in university occupational therapy students. *Healthcare*, 9(2): 197.
26. Anda RF, Fleisher VI, Felitti VJ, Edwards VJ, Whitfield CL, Dube SR, et al. (2004). Childhood abuse, household dysfunction, and indicators of impaired adult worker performance. *Perm J*, 8(1): 30-38.
27. Safaei Pour M, Maveddat E (2013). Assessment of areas with an emphasis on social indicators-economic and human development indicators in combination with the use of GIS techniques and TOPSIS. *Urban Structure and Function Studies*, 1(3): 11-27.
28. Chegeni M, Haghdoost A, Shahrababaki ME, et al (2020). Validity and reliability of the Persian version of the adverse childhood experiences abuse short form. *J Educ Health Promot*, 9: 140.
29. World Health Organization (2004). The World Health Organization quality of life (WHOQOL) - BREF. Geneva: World Health Organization.
30. Yousefy AR, Ghassemi GR, Sarrafzadegan N, et al (2010). Psychometric properties of the WHOQoL-BREF in an Iranian adult sample. *Community Ment Health J*, 46(2): 139-147.
31. Andreassen CS, Billieux J, Griffiths MD, et al. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychol Addict Behav*, 30(2): 252-262.
32. Lin C-Y, Broström A, Nilsen P, et al (2017). Psychometric validation of the Persian Bergen Social Media Addiction Scale using classic test theory and Rasch models. *J Behav Addict*, 6(4): 620-629.
33. Bányai F, Zsila Á, Király O, et al. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PLoS One*, 12(1): e0169839.
34. Chegeni M, Nakhaee N, Shahrababaki PM, et al (2023). Does childhood trauma associate with social media addiction? A cross-sectional study from Iran. *Int J Ment Health Ad*, 21(6): 3637-3649.
35. Kircaburun K, Griffiths MD, Billieux J (2020). Childhood emotional maltreatment and problematic social media use among adolescents: The mediating role of body image dissatisfaction. *Int J Ment Health Ad*, 18(6): 1536-1547.
36. Brand M, Müller A, Wegmann E, et al. (2025). Current interpretations of the I-PACE model of behavioral addictions. *J Behav Addict*, 14(1): 1-17.
37. Masheb RM, Sala M, Marsh AG, et al (2021). Associations between adverse childhood experiences and weight, weight control behaviors and quality of life in Veterans seeking weight management services. *Eat Behav*, 40: 101461.
38. Topitzes J, Pate DJ, Berman ND, Medina-Kirchner C (2016). Adverse childhood experiences, health, and employment: A study of men seeking job services. *Child Abuse Negl*, 61: 23-34.
39. Jahagirdar V, Sequeira LA, Kinattungal N, et al. (2024). Assessment of the impact of social media addiction on psychosocial behaviour like depression, stress, and anxiety in working professionals. *BMC Psychol*, 12(1): 352.