

# EXPLORING THE ASSOCIATION AND DIFFERENCES BETWEEN SOCIAL MEDIA ADDICTION AND LIFE SATISFACTION AMONG MALE VARSITY BASKETBALL PLAYERS AND GENERAL VARSITY STUDENT POPULATION

*Original Research*

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## ABSTRACT

**Background:** In the current digital age, excessive use of social media has become a growing public health concern, particularly among university students. Social Media Addiction (SMA) is increasingly linked with adverse psychological outcomes, including reduced life satisfaction (LS). While existing literature addresses these variables in general populations, limited evidence explores their interrelation among student athletes, specifically male varsity basketball players.

**Objective:** To assess differences in Social Media Addiction and Life Satisfaction between male varsity basketball players and general varsity students, and to explore associations between these variables within both groups.

**Methods:** A quantitative cross-sectional design was employed. The sample consisted of 230 male participants (115 varsity basketball players, 115 general students) from 9 universities. Participants were selected using purposive sampling. Data collection tools included a demographic questionnaire, the Bergen Social Media Addiction Scale (BSMAS), and the Satisfaction with Life Scale (SWLS). Independent samples t-tests were used to compare group means, and simple linear regression assessed associations between SMA and LS. All data were analyzed using IBM SPSS v22.0, with a significance level set at  $p < 0.05$ .

**Results:** Male varsity basketball players had significantly lower SMA scores ( $M = 17.63$ ,  $SD = 3.92$ ) than general students ( $M = 19.33$ ,  $SD = 4.24$ ),  $t(228) = 3.148$ ,  $p = .002$ , Cohen's  $d = 0.416$ . No significant difference was found in LS scores between groups,  $t(228) = -0.213$ ,  $p = .831$ . A significant negative association between SMA and LS was observed among varsity basketball players ( $\beta = -0.202$ ,  $p = .031$ ,  $R^2 = 0.031$ ), but not in the general student population ( $p = .472$ ).

**Conclusion:** Findings suggest that male varsity basketball players are less prone to social media addiction, and lower SMA is associated with better life satisfaction in this group. Universities should consider integrating digital literacy and time management programs to promote psychological well-being among students.

**Keywords:** Addiction, Basketball, Cross-Sectional Studies, Life Satisfaction, Male, Social Media, Students.

## INTRODUCTION

In today's era of digital transformation, social media has emerged as a pervasive and influential force, quietly evolving into a potentially hazardous behavioral concern due to its addictive nature (1). Characterized by compulsive and excessive use across various platforms, Social Media Addiction (SMA) has increasingly garnered attention for its detrimental impact on users' psychological well-being and daily functioning (2). Individuals often find themselves trapped in a cycle of continuous social media engagement, which is difficult to interrupt and can interfere with essential aspects of life such as personal relationships, academic responsibilities, and mental health (3). Psychological traits such as low self-esteem, elevated neuroticism, and an intense desire for public validation have been identified as contributing factors to this behavioral addiction (4). With platforms like Instagram, TikTok, Twitter, and Facebook becoming deeply ingrained in everyday routines, SMA has emerged as a significant mental health concern—particularly among young adults navigating academic environments (5). University students constitute a population uniquely susceptible to SMA, often relying on social media for academic collaboration, entertainment, social connectivity, and identity formation (6). This developmental stage is marked by transitional experiences, increased independence, and heightened self-awareness, all of which are shaped by online interactions. Despite the perceived utility of these platforms, mounting evidence suggests that university students are more vulnerable to SMA compared to other demographic groups, raising concern about the adverse outcomes associated with such dependency (7). Consequences reported in the literature include a notable decline in academic performance, poor sleep hygiene, increased anxiety, and diminished real-life social engagement—all contributing to a decline in overall life satisfaction (8).

Life Satisfaction (LS), a core dimension of subjective well-being, reflects an individual's cognitive evaluation of their life in alignment with personal values and socioeconomic realities (9). It encompasses the presence of positive emotional states, such as happiness and fulfillment, and the absence of distressing emotions, thereby playing a critical role in mental and emotional health (10). Among university students, LS can be particularly fragile due to stressors including academic pressure, social isolation, and financial constraints—each posing a risk to their mental resilience and academic outcomes (11). As this demographic undergoes complex identity formation and transitions into adulthood, maintaining healthy levels of LS becomes essential for their psychological stability and personal growth (12). Consequently, the investigation of the relationship between SMA and LS holds significant implications for understanding and improving the well-being of university students. However, it is important to recognize that the influence of SMA on LS may not manifest uniformly across all student populations. Varsity athletes, for instance, represent a unique subgroup characterized by disciplined routines, rigorous training schedules, and strong goal orientation—factors that may either mitigate or alter their interaction with social media (13). Their limited discretionary time due to the dual demands of sports and academics may act as a natural deterrent to excessive social media use. Nonetheless, the high-profile nature of sports like basketball, which often places players in the public eye, may increase the likelihood of social media engagement, particularly among male varsity basketball players (14). Despite this intriguing dynamic, existing literature lacks dedicated exploration of the distinct patterns of SMA and LS among this specific subgroup, highlighting a significant research gap. To address this void, the current study was undertaken with four primary objectives: to compare the mean scores of SMA between male varsity basketball players and the general varsity student population; to compare the mean scores of LS between the two groups; to examine the association between SMA and LS among male varsity basketball players; and to assess the relationship between SMA and LS among the general varsity student population. By examining these aspects, the study aims to contribute valuable insights into how different student populations experience and manage the dual challenges of social media use and life satisfaction, with the broader goal of supporting mental health and academic success among university students.

## METHODS

This study adopted a quantitative, cross-sectional research design to examine the relationship between social media addiction (SMA) and life satisfaction (LS) among two distinct university student populations: male varsity basketball players and general varsity students. Participants were selected through non-probability purposive sampling based on predefined inclusion criteria. To be eligible, varsity athletes were required to be active male basketball players representing their university at intervarsity, national, or international levels, while also being enrolled in a Bachelor of Science (BS) program. For the comparison group, general varsity students were selected from the same departments, enrolled in the same academic programs and semesters, ensuring homogeneity in academic exposure. The total

initial pool comprised 260 students from 20 departments across 9 universities (2 public and 7 private sector institutions). Following the exclusion of 30 individuals who were either unreachable, declined participation, or failed to respond, the final sample size was composed of 230 participants, yielding a response rate of 88.46%. The final sample consisted of 115 male varsity basketball players ( $M = 21.80$ ,  $SD = 2.209$ ) and 115 general varsity students ( $M = 22.04$ ,  $SD = 2.104$ ). Data were collected using a self-administered questionnaire comprising three components. The demographic section captured key participant information across 11 variables including university, age, gender, academic program, semester, marital status, family income, area of residence, athletic status, level of sports participation, and years of sports experience. Social media addiction was assessed using the Bergen Social Media Addiction Scale (BSMAS), a 6-item instrument (7). This scale measures SMA across six domains: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Responses were recorded using a 5-point Likert scale ranging from “very rarely” to “very often,” with higher scores indicating greater levels of addiction. Prior research has reported Cronbach’s alpha reliability values ranging from 0.81 to 0.91 (15), affirming its psychometric soundness. Life satisfaction was measured using the Satisfaction with Life Scale (SWLS), consisting of five items rated on a Likert scale. Contrary to what was originally mentioned, higher scores on SWLS actually indicate greater life satisfaction (a technical inconsistency noted in the original version). Reliability estimates for this scale typically range from 0.82 to 0.89 (26,27), and in the current study, the SWLS demonstrated acceptable internal consistency with a Cronbach’s alpha of 0.72.

Data collection was conducted in person. Before participation, each individual was briefed in detail regarding the study's purpose and the voluntary nature of their involvement. Informed consent was obtained from all participants, and confidentiality of personal data was assured. Participants were also informed that their responses would remain anonymous and be used solely for academic research purposes. They were encouraged to ask questions, and clarification was provided wherever needed. Each session required approximately 15 to 20 minutes for completion of the questionnaire. All data were analyzed using IBM SPSS version 22.0. Descriptive statistics were first employed to summarize demographic characteristics. Independent samples t-tests were then used to compare the mean SMA and LS scores between the two groups. Simple linear regression analyses were conducted separately for each group to examine the relationship between SMA and LS. A significance level of  $p < 0.05$  was adopted for all inferential tests. Ethical approval for this study was secured from the relevant Institutional Review Board (IRB). Although both BSMAS and SWLS are available in the public domain, the research team still obtained formal permission from the original authors via email to ensure adherence to academic ethical standards. Proper citation and acknowledgment of the original developers were ensured within the manuscript.

## RESULTS

The results of the statistical analyses provided insights into the differences and associations between social media addiction (SMA) and life satisfaction (LS) among male varsity basketball players and general varsity students. An independent samples t-test revealed a statistically significant difference in SMA scores between the two groups. Male varsity basketball players reported a lower mean SMA score ( $M = 17.63$ ,  $SD = 3.923$ ) compared to general varsity students ( $M = 19.33$ ,  $SD = 4.240$ ), with the difference reaching statistical significance ( $t(228) = 3.148$ ,  $p = .002$ ). The effect size, as measured by Cohen’s  $d$ , was 0.416, indicating a moderate difference in SMA between the two populations. Conversely, the t-test comparison for LS scores showed no significant difference between the groups. Male varsity basketball players had a mean LS score of 22.67 ( $SD = 6.091$ ), while general varsity students scored a mean of 22.50 ( $SD = 5.643$ ). The difference was not statistically significant ( $t(228) = -0.213$ ,  $p = .831$ ), with a negligible effect size (Cohen’s  $d = 0.028$ ), suggesting a comparable level of LS in both groups.

To further explore the relationship between SMA and LS, simple linear regression analyses were conducted separately for each group. Among male varsity basketball players, SMA was found to be a significant negative predictor of LS. The model yielded a statistically significant result ( $F(1,113) = 4.800$ ,  $p = .031$ ), with a standardized beta ( $\beta$ ) of -0.202 and unstandardized coefficient ( $B$ ) of -0.313. The model explained 20.7% of the variance in LS ( $R^2 = 0.207$ ), indicating that higher SMA was associated with lower LS within this group. In contrast, the regression analysis for the general varsity student population did not yield a significant result. SMA was not a significant predictor of LS in this group ( $F(1,113) = 0.521$ ,  $p = .472$ ), with a small beta coefficient ( $\beta = 0.068$ ) and an  $R^2$  value of 0.096, suggesting a weak and non-significant relationship between SMA and LS.

**Table 1: Demographic Characteristics Table**

Group	Sample Size (n)	Mean Age	SD Age
Male Varsity Basketball Players	115	21.8	2.209
General Varsity Students	115	22.04	2.104
Total	230	21.92	-

**Table 2: Mean Comparison of SMA among Male Varsity Basketball Players and General Varsity Student Population**

Variable	Male Varsity Basketball Players		General Varsity Student Population		t (228)	p	LL	UL	Cohen's d
	M	SD	M	SD					
SMA	17.63	3.923	19.33	4.240	3.148	.002*	.634	2.757	0.416

Note: N = 230, \* $p < .05$

**Table 3: Mean Comparison of LS among Male Varsity Basketball Players and General Varsity Student Population**

Variable	Male Varsity Basketball Players		General Varsity Student Population		t (228)	p	LL	UL	Cohen's d
	M	SD	M	SD					
Life Satisfaction (LS)	22.67	6.091	22.50	5.643	-.213	.831	-1.691	1.361	0.028

Note: N = 230

**Table 4: Regression Coefficient of SMA and LS among Male Varsity Basketball Players**

Dependent (LS)	Independent Variable (SMA)	B	$\beta$	SE	$R^2$	p
		-.313	-.202	.143	.207	.031*

Note: N = 115, \* $p < .05$

**Table 5: Regression Coefficient of SMA and LS among General Varsity Student Population**

Dependent (LS)	Independent Variable (SMA)	B	$\beta$	SE	$R^2$	p
		.090	.068	.125	.096	.472

Note: N = 115

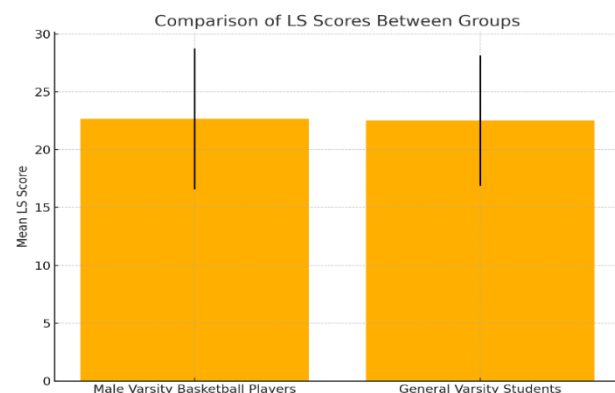


Figure 1 Comparison of LS Score Between Groups

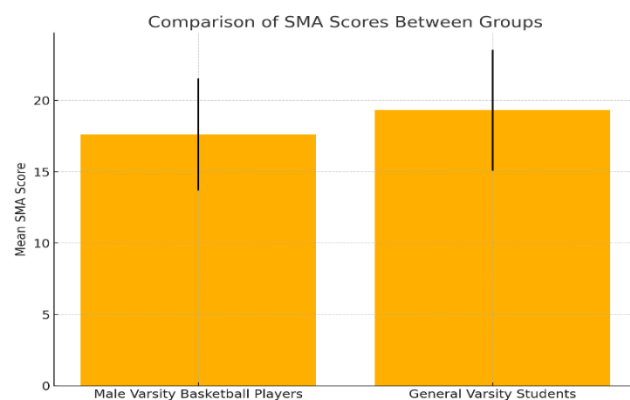


Figure 2 Comparison of SMA Score Between Groups

## DISCUSSION

With the expanding influence of digital media, particularly among youth, the psychological well-being of university students has drawn increasing attention in contemporary research. Despite this rising interest, no prior investigation has directly explored the variations and associations between social media addiction (SMA) and life satisfaction (LS) specifically among male varsity basketball players. To address this critical gap, the present study was conducted, offering valuable insight into the differential experiences of student athletes and their non-athlete peers in relation to digital media engagement and psychological well-being (16). The results indicated that male varsity basketball players exhibited significantly lower levels of SMA compared to the general varsity student population. This aligns with existing literature suggesting that varsity athletes typically have limited opportunities to engage in excessive social media use due to rigorous schedules, structured training, and institutional commitments (17). These athletes are often immersed in highly disciplined routines, which may contribute to a lower predisposition toward addictive behaviors. Moreover, exposure to frequent physical and psychological stress may enhance psychological resilience, which in turn may reduce susceptibility to maladaptive coping strategies such as compulsive social media use (18). However, while these findings are supported by previous studies on athlete populations, the present research did not investigate the underlying mechanisms responsible for this difference, highlighting a need for future inquiry into contributing psychological, social, and behavioral factors (19).

Regarding LS, although male varsity basketball players showed a slightly higher mean score than their general peers, no statistically significant difference emerged between the two groups. This finding mirrors the results from similar comparative studies conducted on athlete and non-athlete student populations, which found equivalent LS levels among both groups. Nevertheless, contrasting evidence does exist, indicating higher LS levels among varsity athletes. Such inconsistency in the literature may be explained by context-specific stressors experienced by athletes, including the challenges of balancing academic workloads with sports participation. These pressures may negate some of the positive psychological benefits typically associated with athletic involvement, thereby leveling LS across athlete and non-athlete groups (20,21). The regression analysis further revealed a meaningful inverse association between SMA and LS among male varsity basketball players, suggesting that reduced social media addiction is linked with enhanced life satisfaction. This outcome is consistent with previous studies conducted on athlete populations, where lower engagement in social media was associated with improved psychological well-being and higher subjective satisfaction (22). The structured and active lifestyle of student athletes may support the development of more effective coping mechanisms, time management skills, and goal-oriented behavior—all contributing to improved LS. In contrast, no significant relationship between SMA and LS was observed within the general varsity student group, which diverges from existing evidence that often reports a negative correlation between these two variables (23). This discrepancy might be attributed to confounding variables such as involvement in extracurricular activities, varying academic demands, or socio-environmental support systems that could mediate the relationship between social media use and psychological well-being (24). The possibility that non-athlete students engage in alternative compensatory behaviors that buffer the effects of excessive social media use cannot be ruled out and deserves further empirical exploration.

The study offers several strengths. It employed a well-matched comparative sample design that minimized academic and environmental variability between groups, thereby enhancing the reliability of observed differences. Furthermore, the use of validated instruments for SMA and LS ensured psychometric robustness. However, certain limitations must be acknowledged. The focus on a single sport—basketball—limits the generalizability of findings to athletes from other disciplines who may have different schedules, social expectations, and levels of public exposure. Moreover, the exclusive focus on male participants excludes gender-based variations, which are often significant in psychological and behavioral research. Another limitation lies in the cross-sectional nature of the study, which restricts causal inferences. Temporal trends and changes in SMA or LS over time remain unexplored. To enhance the generalizability and causal understanding of these findings, future research should incorporate a more diverse sample of varsity athletes across multiple sports and include female participants to capture gender-specific dynamics. Longitudinal studies would be instrumental in establishing causality and identifying long-term trends in social media use and psychological health. Additionally, qualitative investigations could complement quantitative findings by uncovering deeper insights into the motivations and perceptions surrounding social media use among student populations. In conclusion, this study contributes to the limited literature by establishing that male varsity basketball players experience lower levels of social media addiction than their non-athlete peers and that this reduced addiction is positively associated with life satisfaction. However, the absence of a significant relationship in the general varsity student group underscores the complexity of the interaction between digital behavior and psychological well-being. These findings advocate for tailored intervention strategies—such as digital literacy training and time management programs—to help students, particularly non-athletes, achieve a healthier balance in their use of social media while safeguarding their mental well-being.

## CONCLUSION

This study set out to explore the potential differences and associations between social media addiction and life satisfaction among male varsity basketball players and the general varsity student population. The findings revealed that student athletes were less prone to social media addiction, although both groups showed similar levels of life satisfaction. Notably, a negative association between social media addiction and life satisfaction was evident only among the athlete group, suggesting that reduced social media use may be linked to better psychological well-being in this population. These insights underscore the importance of fostering digital discipline within university settings. Implementing targeted digital literacy initiatives and structured time management workshops may support students—particularly those not engaged in athletics—in achieving a more balanced relationship with social media while safeguarding their overall life satisfaction.

### Author Contribution

Author	Contribution
Ahsan Ali Saeed	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Fariq Ahmed	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Asif Ali	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Muhammad Farooq Shahan	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Muhammad Afaq	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Muhammad Azam*	Substantial Contribution to study design and Data Analysis Has given Final Approval of the version to be published

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