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GENDER DIFFERENCES BETWEEN SOCIAL SUPPORT AND QUALITY OF LIFE AMONG UNIVERSITY ATHLETES

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ABSTRACT

This study aimed to explore gender-based differences in perceived social support (SS) and quality of life (QoL) among university athletes. The research involved 154 student-athletes from Universiti Teknologi MARA Cawangan Pahang, Malaysia, equally divided between male and female participants. A quantitative, cross-sectional design was employed, utilizing the Social Support Questionnaire Short Form (SSQ) and the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-SF) to assess the perceived social support and QoL of athletes. Descriptive statistics revealed moderate to high scores for both social support (M = 2.71) and QoL (M = 3.69), indicating a generally favorable perception of the psychosocial environment. Mann–Whitney U tests revealed significant gender differences, with male athletes reporting higher levels of social support (Mean Rank = 85.36) and QoL (Mean Rank = 86.65) compared to their female counterparts (social support Mean Rank = 69.64, QoL Mean Rank = 68.35). The findings suggest that males benefit from a broader network of support, while females exhibit higher satisfaction with their support systems. This research underscores the importance of understanding gender-specific dynamics in social support and QoL, offering insights for enhancing athletes' overall wellbeing through targeted interventions that emphasize both the quantity and quality of support systems.

Keywords: *Social Support, Quality of Life, University Athletes, Perceived Support*

INTRODUCTION

Quality of life (QoL), as conceptualized by the WHO, reflects an individual's subjective perception of their position in life within the context of their culture and value systems, relative to their goals and expectations (Ingrassia et al., 2020). This definition emphasizes that QoL constitutes a multidimensional construct, encompassing physical health, psychological state, level of independence, social relationships, environmental conditions, and spiritual domains. Consequently, both individual athletes and the broader sporting community suffer detrimental effects when these essential components are compromised or inadequately addressed (Baniasadi & Salehian, 2021). International statistics from the World Health Organization indicate that approximately 12% of global health burdens stem from mental health-related conditions. Among collegiate populations, research demonstrates that 60% of psychological wellness challenges in young adults correlate directly with mental health disorders (Radford, 2023).

Life satisfaction, as a fundamental component of overall wellness, demonstrates positive associations with enhanced longevity and reduced mortality risk among athletic populations (Altulea et al., 2024). The disparity between athletes' expectations and actual experiences defines quality of life perception, with crucial dimensions including individual perspectives on general health and satisfaction across physical, psychological, social, and economic life domains (Nowak, Kuśnierz & Bajkowski., 2022). Quality of life maintains strong connections with exercise and physical activity participation. Bourdieu's theoretical framework suggests that exercise motivation and behavioral preferences depend significantly on individuals' economic status, educational background, and cultural comprehension of lifestyle trends and habits (Chan et al., 2019). Emerging evidence reveals significant gender differences in mental health and quality of life among athletes. Across many studies, female athletes report higher rates of certain psychological symptoms and lower self-reported well-being compared to their male counterparts. For example, an extensive survey of over 500 elite athletes in Australia found that women athletes had higher frequencies of anxiety, depression, and other mental health symptoms, along with lower mental well-being scores, than men athletes (Walton et al., 2021). Notably, there were no gender differences in overall psychological distress or life satisfaction in that study, yet women showed elevated symptoms in specific domains like anxiety and body image concerns (Walton et al., 2021). These findings reflect broader epidemiological trends (in non-athlete populations, women typically have greater prevalence of internalizing disorders while men have more substance use disorders), but they carry unique implications in sport contexts. Female athletes may experience distinct pressures – for instance, negative body image and eating disorder risk are often higher among women athletes due to both competitive weight expectations and societal beauty norms (Walton et al., 2021; Pascoe et al., 2022). Male athletes, on the other hand, might underreport psychological struggles due to stigma or exhibit different risk profiles (e.g. relatively higher rates of alcohol or drug misuse) (Rice et al., 2016). Such differences suggest that gender plays a role in athletes' mental health profiles and their subjective quality of life.

Social support operates through multiple mechanisms to influence athlete health outcomes. Cohen and Wills (1985) proposed two theoretical pathways: the main effect model, wherein support directly enhances wellbeing regardless of stress levels, and the stress-buffering model, wherein support moderates the negative impact of stressors. In athletic populations, Luo et al. (2025) conducted a meta-analysis demonstrating that social support functions primarily as a protective resource against stress and symptomatology; however, their findings also revealed that effect sizes vary considerably depending on the type of support measured and the specific outcome assessed. This variability suggests that the relationship between social support and athlete wellbeing is more nuanced than early unidimensional models proposed. For female athletes, proactively offering help and creating an environment where they feel cared for without having to ask may improve their stress outcomes. Indeed, women athletes often cite empathic listening and unsolicited check-ins by coaches or teammates as extremely valuable forms of support (Nicholls et al., 2016). Male athletes may benefit from support that respects their autonomy but is readily available when crises occur – for instance, ensuring resources are clearly there for a male athlete recovering from injury, even if he hasn't actively sought them, and normalizing their utilization in extreme circumstances. It's also been observed that women athletes respond well to social support that provides

reassurance and a sense of belonging, which can reduce feelings of isolation or self-doubt that they may experience in male-dominated sport settings (Sarrazin et al., 2021).

Despite the established theoretical frameworks linking social support to athlete wellbeing, several methodological limitations characterise the existing literature. Tamminen and Holt (2010) argued that inadequate operationalisation of social support constructs has hindered the development of targeted interventions. Furthermore, Hankinson & Akpanudo (2023) systematically reviewed gender representation in sport psychology research and found that studies have historically treated athletes as a homogeneous group or focused predominantly on male cohorts, thereby obscuring potential gender differences in support mechanisms and outcomes. While Freeman and Rees (2010) demonstrated that perceived support from teammates directly influences self-confidence, their work did not examine whether these effects operate equivalently across genders. This methodological gap is particularly problematic given the documented differences in how male and female athletes perceive, seek, and utilise social support.

Given the documented importance of general health, quality of life, and social support levels, coupled with their relationships to physical activity participation among young athletes, these variables warrant investigation across male and female university athlete populations to understand gender-specific patterns and inform targeted interventions. Hence, this research aims to fill this gap by investigating the role of social support in shaping the quality of life among university athletes, while also examining potential differences between male and female athletes, thereby contributing to the broader discourse on athlete well-being and performance.

METHODOLOGY

Participants

This investigation employed a quantitative, cross-sectional research design to examine gender-based variations in perceived social support and quality of life among university athletes. The study was conducted at Universiti Teknologi MARA Cawangan Pahang, Malaysia. The sample comprised 154 student-athletes equally distributed between male (n = 77) and female (n = 77) with a mean age 21.78 (±1.15) years.

The inclusion criteria required participants to be enrolled as full-time students, actively engaged in university sports programs, aged 18 years or older, and free from physical disabilities that might influence their athletic participation or social support perceptions. Exclusion criteria eliminated individuals who had not participated in sports activities within the previous six months, those with diagnosed mental health conditions, athletes recovering from injuries, or individuals with chronic illnesses that could impact daily functioning. Sample size determination was conducted using G*Power version 3.1.9.7, which indicated a minimum requirement of 128 participants to detect medium effect sizes with 80% statistical power. To account for potential participant attrition of approximately 20%, the final sample size was expanded to 154 participants.

Instruments

The Social Support Questionnaire (SSQ)

The Social Support Questionnaire Short Form, developed by Sarason and colleagues in 1987, was utilized to assess two fundamental dimensions of social support among athletes. This 12-item instrument evaluates both the perceived availability of support and individual satisfaction with existing support systems. The questionnaire's design recognizes that individuals may experience varying levels of satisfaction with different amounts of perceived support, acknowledging that optimal support levels may differ across individuals. This instrument yields three subscale scores indexing distinct dimensions of perceived social support: Appraisal Support (items 2, 4, 6, 11), Belonging Support (items 1, 5, 7, 9), and Tangible Support (items 3, 8, 10, 12). Items are rated on a 4-point Likert scale ranging from “Definitely True” to “Definitely False”. Items 1, 2, 7, 8, 11, and 12 are reverse scored, and all subscale and total scores are treated as

continuous variables, with higher scores indicating greater perceived availability of the respective form of support. Depressive symptoms were assessed with a 27-point continuous scale, with total scores interpreted using established severity bands: 1–4 (minimal), 5–9 (mild), 10–14 (moderate), 15–19 (moderately severe), and 20–27 (severe) depression. Internal consistency reliability was confirmed with Cronbach's alpha coefficients of 0.91 for availability measures and 0.88 for satisfaction measures.

The Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-SF)

The Quality of Life Enjoyment and Satisfaction Questionnaire adapted from Endicott et al, (1993) served as the second primary instrument, measuring quality of life across multiple domains relevant to student-athlete experiences. This 15-item scale assesses satisfaction and enjoyment levels in areas including physical health, psychological well-being, social relationships, and academic performance. Participants rate their satisfaction using a five-point Likert scale with responses ranging from very poor to very good. Total scores are calculated as (high score minus low score) was divided by the number of desired levels to determine the class interval width; the resulting cut-off points were then used to classify the obtained mean scores as high satisfaction (3.67–5.00), moderate satisfaction (2.34–3.66), or low satisfaction (1.00–2.33). Higher mean scores thus reflect greater satisfaction with the assessed domain (Best & Kahn, 1977). The instrument demonstrates strong psychometric properties with Cronbach's alpha values exceeding 0.85 across all measured domains, ensuring reliable measurement of quality of life constructs.

Data collection procedure

Participant recruitment involved direct personal contact or indirect approaches through coaching staff, with comprehensive explanations of study objectives and participation requirements provided to all potential participants. Emphasis was placed on the voluntary, confidential, and anonymous nature of participation, ensuring ethical compliance throughout the recruitment process. Consenting participants received questionnaire packets to complete with completed instruments returned immediately upon completion. In addition, they were informed that they could discontinue participation at any time when they were filling in the questionnaire. The protocol were conducted in accordance with the Declaration of Helsinki and was approved by the University Research Ethics Committee (REC/01/2025 (ST/MR/98).

Statistical analyses

Data analysis procedures utilized IBM SPSS Statistics Version 29.0 for comprehensive statistical examination. Descriptive statistics summarized demographic characteristics and mean scores for both social support and quality of life measures. The Mann-Whitney U test was employed to examine gender differences in perceived social support and quality of life, with statistical significance established at $p < 0.05$.

RESULT

Descriptive Statistics of Age by Gender

Sample	N	Minimum	Maximum	Medium	M	SD
Total	154	1	2	22	21.78	1.11
Female	77	20	24	22	21.47	0.962
Male	77	20	23	22	22.09	1.242

Based on the descriptive statistics presented in the table, the total sample (N = 154) recorded a median value of 22, with an overall mean score of 21.78 and a standard deviation of 1.11. For female participants (n = 77), the scores ranged from 20 to 24, with a median of 22, a mean of 21.47, and a standard deviation of 0.96. Male participants (n = 77) showed a score range of 20 to 23, with a median of 22, a higher mean of 22.09, and a standard deviation of 1.24. These results indicate that both genders shared a similar central tendency (median = 22), although males demonstrated a slightly higher average score and greater variability compared with females.

Descriptive Scoring SS & QoL

	N	Minimum	Maximum	Mean	SD
Total Social Support	154	2	4	2.71	.319
Total Quality of Life	154	3	5	3.69	.472
Total	154				

The descriptive analysis shows that participants reported moderately high levels of social support and quality of life. Total Social Support (N = 154) ranged from 2 to 4, with a mean score of 2.71 (SD = 0.319), indicating that most respondents perceived a generally supportive social environment with relatively low variability across the sample. Total Quality of Life (N = 154) ranged from 3 to 5, with a mean of 3.69 (SD = 0.472), suggesting that participants experienced a favourable overall quality of life, with slightly greater variability compared to social support. Collectively, these descriptive statistics reflect that the sample reported positive perceptions across both constructs, with quality of life showing a marginally wider distribution of responses than social support.

Mann–Whitney U Test Results for Gender Differences

	Gender	N	Mean Rank
Total Social Support	Male	77	85.36
	Female	77	69.64
Total		154	
Total Quality of life	Male	77	86.65
	Female	77	68.35
Total		154	

The mean rank distributions, supported by the Mann–Whitney U analysis, demonstrate a consistent gender difference across both variables. For Total Social Support, males recorded a higher mean rank (85.36) than females (69.64). The Mann–Whitney U test revealed a statistically significant difference between groups (U-value = 2,359.50, Z-value = -2.12, p-value = .034), with a small effect size (r = .17). A similar trend was observed for Total Quality of Life, where males showed a higher mean rank (86.65) compared to females (68.35), with the Mann–Whitney U test indicating a significant group difference (U-value = 2,260.00, Z-value = -2.47, p-value = .014, r= .20). Collectively, these findings suggest that male respondents experienced more favourable outcomes across both psychosocial constructs. The combined evidence from the mean ranks and the Mann–Whitney U statistics highlights a clear gender-based disparity, with males reporting higher levels of social support and quality of life than females.

DISCUSSION

This study examined gender-based differences in perceived social support and quality of life (QoL) among university athletes. The results indicate significant gender disparities, with male athletes reporting higher levels of both social support and QoL compared to their female counterparts. The Mann–Whitney U test confirmed these differences, as males had higher mean ranks for both social support (Mean Rank = 85.36) and QoL (Mean Rank = 86.65), while females had lower mean ranks (social support: Mean Rank = 69.64, QoL: Mean Rank = 68.35). These findings are consistent with previous research, which highlights that male athletes tend to report stronger social support networks and better life satisfaction (Yang et al., 2014). Despite similar central tendencies in age (Mdn = 22 for both genders), the greater variability observed among male athletes (SD = 1.24) compared to female athletes (SD = 0.96) suggests that while male athletes may have more diverse sources of support, their experiences with social support are more varied. In contrast, female athletes, despite fewer support sources, may report higher satisfaction with their networks, which could influence their overall quality of life (Yang et al., 2014; Walton et al., 2021).

In this study, both male and female university athletes reported generally favourable levels of social support and quality of life (QoL), yet the Mann–Whitney U analysis showed that female athletes consistently occupied lower mean ranks for both constructs, particularly QoL (female 68.35 vs. male 86.65), indicating a comparatively lower QoL among women despite being in the same sporting and academic environment. This relative disadvantage is consistent with evidence that women athletes face additional psychosocial stressors, such as gendered expectations and resource inequities, which can place downward pressure on wellbeing (Pascoe et al., 2022; Vento et al., 2021). At the same time, prior work shows that when female athletes perceive strong, high-quality social support, their wellbeing and life satisfaction improve markedly (Pan et al., 2022; Walton et al., 2021) Taken together, the present results suggest that female athletes in this setting may not be accessing or experiencing support at a level sufficient to offset these gender-specific stressors, leading to lower QoL relative to male peers. Strengthening emotionally responsive support structures around female athletes—particularly from peers, coaches, and family—should therefore be a priority for university sport programmes seeking to reduce gender gaps in QoL and to promote more equitable psychosocial outcomes across teams

In examining the role of peer support, it is evident that peer support is a significant contributor to both social support and overall wellbeing for athletes. Male and female athletes alike benefit from the support of teammates, yet gender-based differences in peer support dynamics were observed. Female athletes, who tend to have emotionally supportive relationships within their teams, reported higher satisfaction with their social support, which in turn contributed to their overall life satisfaction (Cho et al., 2020). Male athletes, however, often experience a more competitive or hierarchical team environment, which may hinder the development of deep emotional connections within the team (Pascoe et al., 2022). These differences suggest that coaches and sport psychologists need to foster more emotionally inclusive environments for male athletes, where emotional vulnerability and support-seeking behaviors are normalized. Female athletes, who typically benefit from emotionally intimate support systems, could also benefit from continued emphasis on the quality of these relationships.

Satisfaction with social support appeared to be a key factor influencing athletes' mental health and overall quality of life. Female athletes, despite having fewer support sources, reported significantly higher satisfaction with the support they received compared to their male counterparts. This finding supports the idea that female athletes value emotionally supportive relationships over the sheer quantity of support (Walton et al., 2021). For male athletes, the broader range of support sources did not necessarily translate into higher satisfaction. Male athletes, who may underutilize emotional support due to societal expectations of toughness and self-reliance, might benefit from more tailored interventions that focus on enhancing the emotional depth of their support networks. Encouraging male athletes to engage more fully with their support systems, both emotionally and socially, could significantly improve their wellbeing and overall satisfaction with their social networks.

The results also have important implications for athletes' mental health and performance. Research has consistently shown that social support is a protective factor against stress, anxiety, and burnout (Delfín et al., 2024). In this study, female athletes, who generally reported higher satisfaction with social support, appeared to experience better mental health outcomes, including lower levels of stress and higher motivation. Conversely, male athletes, who reported less satisfaction with their support networks, may be at greater risk of psychological distress, burnout, and disengagement (Ramaeker & Petrie, 2019). These findings highlight the importance of creating support systems that cater not only to the quantity of support available but also to the quality of that support. Male athletes, in particular, may benefit from interventions aimed at encouraging emotional openness and improving the emotional depth of their support relationships (Wang et al., 2025). By fostering environments that promote deeper connections among male athletes, their overall wellbeing, motivation, and performance could improve significantly.

Lastly, these findings underscore the importance of considering gender differences in the design of support systems for athletes. While both male and female athletes benefit from social support, the ways in which they utilize and perceive that support can vary significantly. Female athletes tend to rely on smaller, more emotionally connected networks, which may result in higher satisfaction and greater wellbeing (Herrero, Jejurikar, & Carter, 2021). In contrast, male athletes, who often have larger support networks, may struggle with lower satisfaction due to the less emotionally engaged nature of their relationships (Brown et al., 2018). To address these gender-specific differences, sports programs should prioritize not only increasing the number of support sources for athletes but also fostering more emotionally connected and supportive environments, particularly for male athletes. By improving the emotional quality of support systems for both genders, athletic programs can enhance athletes' mental health, motivation, and performance, leading to better overall outcomes both on and off the field.

CONCLUSION

In conclusion, male athletes reported higher levels of both social support and QoL compared to female athletes. While males benefit from broader support networks, females, despite fewer sources, reported greater satisfaction with the support they received, suggesting the quality of support may play a more critical role for women. These findings emphasize the need for gender-specific interventions in sports programs. For male athletes, enhancing the emotional quality of support networks could improve their overall wellbeing, while for female athletes, fostering emotionally supportive relationships should remain a priority. Practically, university sport programmes should consider implementing coach education workshops on gender-sensitive communication and emotional support strategies, establishing peer mentorship programmes that pair athletes with trained student mentors, developing structured support systems including regular mental health check-ins and accessible counselling services, and creating team-building activities that encourage emotional openness across genders. By focusing on both the quantity and emotional depth of support, sports organizations can create more personalized environments that enhance athletes' mental health, motivation, and performance. Addressing these gender disparities in social support will contribute to better outcomes for athletes, both on and off the field.

AUTHORS' CONTRIBUTION

All authors and co-authors have contributed, read, revised, and agreed to publish this manuscript.

CONFLICT OF INTEREST

Authors state no conflict of interest.

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