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Do Emotions Run Differently with Gender? A Cross-sectional Investigation on the Gender-Related Disparities in Emotional Intelligence and Emotional Eating among Varsity Sprinters

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ABSTRACT

After a long term and consistent focus on the psychological well-being of varsity students and athletes separately, the attention of the relevant practitioners and researchers has been shifted towards varsity athletes. Particularly, varsity sprinters may fall among the most influenced varsity athlete group. Consistent exposure to these negative psychological factors may promote emotional dysregulation while leading them to low Emotional Intelligence (EI) and elevated Emotional Eating (EmE) behaviors. Gender, in addition, might also emerge as a pivotal variable in the exploration of both EI and EmE. This study, therefore, sought to explore the gender-related disparities in both EI and EmE behaviors among varsity sprinters. A final sample of 116 varsity sprinters of which 74 were male sprinters and 42 were female sprinters were included in the analysis. A demographic tool comprising of personal information related questions, BEIS-10 and EEQ were utilized for gathering data. The Mann-Whitney U test and two-step hierarchical multiple regression analysis were applied on the gathered data. The results revealed that the EmE behaviors were notably high among female varsity sprinters as compared to male varsity sprinters. Consistently, male varsity sprinters reported high scores on all components of EI than female varsity sprinters. Lastly, for the possible predictors of EmE behavior among varsity sprinters, gender remained the only significant predictor while confirming its dominant role in predicting EmE behaviors among varsity sprinters. These findings highlight the need for gender-specific interventions that may address emotional regulation strategies beyond general EI skills among varsity sprinters.

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1. Introduction

After a long term and consistent focus on the psychological well-being of varsity students and athletes separately, the attention of the relevant practitioners and researchers has been shifted towards varsity athletes. In particular, those varsity athletes who participate in competitive sports and are also enrolled in high level academic degrees. This is because they are often exposed to performance anxieties, rigorous training schedules and intense academic pressures all of which can possibly challenge their psychological resilience (Beisecker et al., 2024). When student-athletes juggle the pressures of competitive sports and academics, their emotional responses can often be pushed to the limit. In such situations, it becomes important

to pay attention to how they process and manage emotions (Chan, 2023). Taking care of this emotional side doesn't just help with their performance rather it can also make a real difference in their overall mental well-being (Bird, Quinton, & Cumming, 2021). Among the various psychological factors at play, Emotional Intelligence (EI) and Emotional Eating (EmE) have been getting more attention lately. This is likely because they're connected in how they influence coping habits, especially when stress levels run high. EmE can be conceptualized as a pattern of consuming edible meals or food to counter negative state of emotions (Dakanalis et al., 2023). This eating behavior isn't like the traditional psychological hunger where a person only consumes food when required by the body. Rather, it is a maladaptive coping mechanism that is driven by emotional distress (Ljubicic et al., 2023). In varsity athletes, EmE can emerge as a compensatory behavior to cope with academic, athletic and competitive stress (Bulut et al., 2024). Even though it is often overlooked, however EmE may have several negative and substantial physical and psychological consequences (Burnatowska, Surma, & Olszanecka-Glinianowicz, 2022). The physical consequences may include fluctuations in weight leading to body dissatisfaction, disrupted nutritional patterns and impaired athletic performance (Cecchetto et al., 2021). Whereas, psychologically, EmE can be associated with the feelings of guilt, lowered self-esteem and loss of control, all of which may increase one's vulnerability to depression and anxiety (Bemanian et al., 2021). Therefore, it is highly crucial to understand the psychological roots of EmE while particularly focusing on EI as a key influencing factors(Dhivya et al., 2023; Ragmoun, 2024; Ragmoun & Alfalih, 2024).

Emotional Intelligence (EI), if described broadly, can be referred to as the perceiving, understanding, managing and regulating one's own and others' emotions (Bru-Luna et al., 2021). Individuals with high EI levels may be better at managing their interpersonal relationships and regulating their emotions (Khassawneh et al., 2022). Furthermore, they may also possess better stress management abilities that may facilitate them in countering highly stressful and competitive situations (Alzoubi & Aziz, 2021). Particularly, varsity athletes in this regard might be considered among the most benefited population. This may be because due to high EI levels, varsity athletes may be able to cope with highly competitive athletic and academic environments (Mercader-Rubio, Angel, et al., 2022). However, low EI levels may also demonstrate several negative implications that may involve poor coping strategies, impulsive behavior and an increased risk of mental health issues (Rodriguez-Romo et al., 2021). As these implications resemble the negative consequences of EmE, therefore it is significantly crucial to figure out the association between both EI and EmE particularly among varsity sprinters. Furthermore, in line with the Transactional Model of Stress and Copying, EI may serve as a key factor that might influence copying styles like EmE (Ben-Zur, 2020).

Conversely, our decision to focus on varsity sprinters stemmed from the unique physiological and psychological profile possessed by them (Thompson et al., 2021). Unlike the athlete participating in endurance sports, sprinters often face short bursts of intense pressure (Loturco et al., 2023). Their performance is strongly relied upon power, reaction time and their physical form or structure (Miller, 2021). This competitive nature of sprinting, where even milliseconds matter, generates extremely stressful and competitive environment (Loturco et al., 2024). Furthermore, to maintain a lean body composition and structured dietary patterns to excel in this particular sport, varsity sprinters may be more susceptible to emotional dysregulation (Walker et al., 2023). Gender, in addition, might also emerge as a pivotal variable in the exploration of both EI and EmE. Numerous studies have previously highlighted and identified the gender related disparities in EI and EmE behaviors among general populations (Du et al., 2022; Dumciene & Sipaviciene, 2021). However, none of the past studies have particularly focused on the exploration of variances in EI and EmE behaviors among varsity sprinters with respect to gender. This study, therefore, seeks to explore the gender-related disparities in both EI and EmE behaviors among varsity sprinters. It further aims to uncover how emotions may indeed run differently across gender. For this reason, this particular study was comprised of three primary objectives: 1) To examine the gender-related disparities in EmE levels among varsity sprinters; 2) To identify the gender-related disparities in EI components among varsity sprinters; 3) To evaluate the predictors of EmE among varsity sprinters. The findings of this study may offer valuable insights into how gender influences emotional processing and behavior among varsity sprinters. By identifying disparities in EI and EmE, the study can inform targeted psychological support and training interventions. These insights may help coaches and sports psychologists tailor gender-sensitive strategies to

enhance athletic performance and emotional well-being(Mohammad, 2015; Mohammad & Ahmed, 2017).

2. Material and Methods

2.1. Research Design

This research used a quantitative, cross-sectional research design.

2.2. Population and Sample size

We targeted varsity sprinters having at least intervarsity level participation with ages spanning from 18 to 25 years. A total of 6 universities (out of which 2 were public and 4 were private) were targeted for this purpose. The reason behind selecting these 6 universities using convenient sampling technique for data gathering was based on their regional accessibility and active participation in national intervarsity sports competitions. After 4 weeks of consistent effort, we were able to identify a total of 128 varsity sprinters, suitable for this study. Initially, due to limited size of population, we decided to include the total population as the final sample for this study. However, 12 participants were later excluded due to several reasons including scheduling conflicts and lack of interest. This left behind a final sample of 116 varsity sprinters, constituting to a response rate of 90.62.

Table 1: Characteristics Table

Variables	Frequency(f)	Percentage (%age)	M	SD
Age			21.25	1.788
Gender				
Male	74	63.8		
Female	42	36.2		
Area of Residence				
Urban	53	45.7		
Rural	63	54.3		
Family Income				
Poor	23	19.8		
Middle-class	76	65.5		
Wealthy	17	14.7		
Highest Playing Level				
Intervarsity	49	42.2		
National	67	57.8		
Sports Experience	Minimum	Maximum	M	SD
	4	7	5.58	1.105

Note: N = 116

2.3. Data Collection Instruments

A demographic questionnaire, the BEIS-10 and EEQ-10 scales were utilized for this study. These tools were publicly available online on various trusted academic databases such as Google Scholar, ResearchGate, etc. However, before utilizing these tools, prior permissions were obtained from the original authors of both tools.

2.3.1. Demographics

The demographic portion consisted of 6 items including gender, age, area of residence, family income, highest playing level and sports experience.

2.3.2. The Brief Emotional Intelligence Scale (BEIS-10)

The BEIS 10 scale, created by Davies et al. (2010) was utilized in this study to assess and examine the individuals' EI. A wide range of responses were recorded for all ten queries present in this scale. The tool was further divided into five factors, each consisting of a pair of items. Additionally, this tool was particularly chosen due to it being utilized in several past studies (Hatamnejad et al., 2023; Shahan, Ali, & Rasool, 2023). Secondly, prior studies that accompanied this tool had also reported the Cronbach’s alpha score ranging between 0.84 to 0.90 (Aronen, Kokkonen, & Hintsa, 2021; Thomas & Heath, 2022). On the other hand, Cronbach's alpha score of BEIS-10 in this study was 0.83.

2.3.3. Emotional Eater Questionnaire (EEQ)

EEQ, designed by Garaulet et al. (2012), was used to assess the EE behaviors of the participants. This scale was also comprised of 10 items, all of which were summed up to present the EE scores of each participant. Our decision to utilize this tool to measure emotional eating behaviors relied upon the fact that several past studies had employed this tool (Barcın-Güzeldere & Devrim-Lanpir, 2022; Mardiyah, Wandini, & Dwiyana, 2024). Consistently, it has been reported to possess a Cronbach's alpha score of 0.70 (Garaulet et al., 2012). However, in this research, the Cronbach's alpha score of EEQ was 0.78.

2.4. Ethical Approval & Procedure

The study was approved by the designated department of our university before it being initiated. After compiling all the above-mentioned tools in a single questionnaire, the data collection procedure was initiated. All participants were provided with necessary information including their voluntary participation in the study, keeping of their responses confidential and utilization of their collected data for research purposes only. Participants were further told that there would be no adverse consequences for them if they participated in the study. Lastly, they were also allowed to ask questions if they failed to understand any question. The questionnaire itself took about 20 or 25 minutes to finish by each participant.

2.5. Data Analysis

The gathered data that was obtained through questionnaires was examined using SPSS software, version 22.0. Due to the number of participants being unequal in both groups with respect to gender, we applied Mann-Whitney U test. The descriptive statistics was also employed to streamline the frequencies, percentages and mean values of all demographic characteristics of the participants. Lastly, during the preliminary analysis, the correlation table showed notable correlation between a few confounding factors and the dependent variable EE. Therefore, to control their effect, we carried out a two-step hierarchical multiple regression analysis.

3. Results

3.1. Gender Related Disparities in Emotional Eating (EmE)

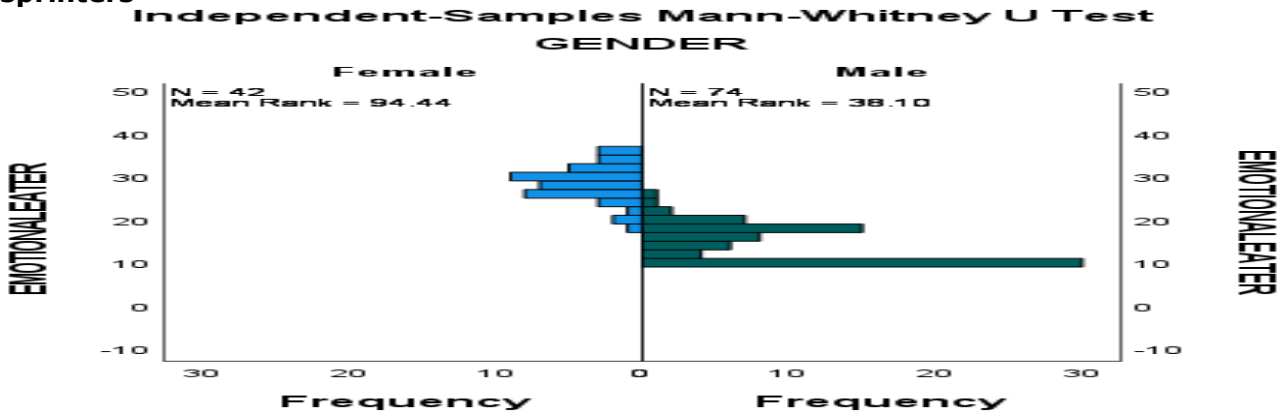
To examine the gender-related disparities in EmE among varsity sprinters, we chose Mann-Whitney U test. The outcomes of the test revealed prominent and significant disparities in EmE behaviors among varsity sprinters of both genders with U = 3063.50, Z = 8.754 and *p* = <.001 (See Table 2). Female varsity sprinters reported high median values (Mdn = 28.00) as compared to their male counterparts (Mdn = 13.50).

Table 2: Outcomes of Gender-related Disparities in EE among Varsity Sprinters

Variable	Median Male	Female	U	W	Z	*p*
EmE	13.50	28.00	3063.50	3966.50	8.754	<.001

Note: n = 116

Figure 1: Demonstrating Mean rank values of EmE across gender among varsity sprinters



In addition, female varsity sprinters demonstrated exceptionally high mean rank values (mean rank = 94.44) in contrast to male varsity sprinters (mean rank = 38.10) having large

effect size of r = 0.81 (See Fig 1). Taken together, these results highlighted that female varsity sprinters might exhibit high EmE behaviors as opposed to male varsity sprinters.

3.2. Gender Related Disparities in Emotional Intelligence (EI)

Consistently, to measure gender related disparities in EI factors among varsity sprinters, Mann-Whitney U test was utilized. The results emerged from this test highlighted that varsity sprinters did possess gender related disparities in all EI factors. With respect to "Appraisal of own emotions" it was revealed that male varsity sprinters (Mdn = 8.00) possessed high levels of this particular EI component in contrast to female varsity sprinters (Mdn = 7.00) along with U = 1065.50, Z = -2.862 and p = <.01. Similarly, for "Appraisal of others' emotions" the test presented similar findings with male varsity sprinters (Mdn = 8.00) reporting elevated levels of this EI factor as compared with female counterparts (Mdn = 7.00) while having U = 960.50, Z = -3.472 and p = <.01. (See Table 3)

Table 3: Gender-related Disparities in EI among Varsity Sprinters

	Mean Rank		Median				
Variables	**Male**	**Female**	**Male**	**Female**	**U**	**Z**	***p***
Appraisal of own emotions	65.10	46.87	8.00	7.00	1065.50	-2.862	0.004**
Appraisal of others' emotions	66.52	44.37	8.00	7.00	960.50	-3.472	0.001**
Regulation of own emotions	65.07	46.93	7.50	6.00	1068.00	-2.823	0.005**
Regulation of others' emotions	64.28	48.31	8.00	6.50	1126.00	-2.493	0.013*
Utilization of emotions	68.34	41.17	8.00	6.00	826.00	-4.243	0.000**

Note: n = 116, ** p < 0.01; * p < 0.05

Likewise, the third factor of EI "Regulations of own emotions" also revealed a substantial gender-related disparity. It was observed that male varsity sprinters (Mdn = 7.50) possessed high levels of this factor as compared to female varsity sprinters (Mdn = 7.00) with U = 1068.00, Z = -2.823 and p = <.01. Similar to the previous three factors, the fourth component of EI "Regulation of others' emotions" also unveiled significant gender disparities with U = 1126.00, Z = -2.493 and p = <.05. The results proposed that male varsity sprinters (Mdn = 8.00) carried higher levels of this particular EI factor as compared to female varsity sprinters (Mdn = 6.50). Lastly, the final EI factor "Utilization of emotions" was also disclosed to exhibit significant gender disparity with U = 826.00, Z = -4.243 and p = <.01. The results presented that male varsity sprinters (Mdn = 8.00) scored higher with respect to this particular EI component in comparison to female varsity sprinters (Mdn = 6.00). (See Table 3)

3.3. Assessment of the possible predictors of Emotional Eating (EmE)

We applied a two-step hierarchical multiple regression analysis to examine the possible predictors of EmE among varsity sprinters. In the first step of regression, three confounding variables including gender, highest playing level and sports experience were entered as control variables. The results unveiled a statistically significant model with F change being $p < 0.001$. Additionally, the total model accounted for around 72.3 % variance in EmE due to R^2 value being .723. However, among these confounding variables, gender was the only significant predictor of EmE (B = 13.63, β = .838, t = 15.83, p < .001). This further suggested that substantial differences in EmE scores did exist in both genders. (See Table 4).

In the second step, we added all of the EI factors along with the previously added confounding variables. This overall model also reached statistical significance and produced a slight increase in explained variance (R^2 = .730), with a ΔR^2 of .008, which was statistically significant (p < .001) but practically negligible. The results indicated that none of the EI dimensions emerged as significant predictors of EmE (p > .05) among varsity sprinters. Gender, however, remained the only significant predictor in the full model (B = 13.77, β = .846, t = 14.33, p < .001), confirming its dominant role in predicting EmE behaviors among varsity sprinters.

Table 4: Results of Hierarchical Multiple Regression analysis for possible EmE predictors

Dependent variable	Predictors	B	β	t	*p*	95% CI		R^2	ΔR^2	*p*
						Low	Up			
	Step 1							0.723	0.723	.000[b]
	Gender	13.630	0.838	15.827	0.000*	11.924	15.336			
	Highest playing level	-1.136	-0.072	-1.404	0.163	-2.739	0.467			
Emotional Eating	Sports Experience	0.032	0.004	0.084	0.934	-0.722	0.785			
	Step 2							0.730	0.008	.000[c]
	Gender	13.766	0.846	14.329	0.000*	11.861	15.670			
	Highest playing level	-1.106	-0.070	-1.337	0.184	-2.746	0.533			
	Sports Experience	0.067	0.009	0.170	0.865	-0.717	0.852			
	Appraisal of own emotions	0.209	0.045	0.769	0.444	-0.330	0.749			
	Appraisal of others' emotions	-0.325	-0.066	-1.131	0.260	-0.895	0.245			
	Regulation of own emotions	-0.045	-0.011	-0.157	0.875	-0.608	0.519			
	Regulation of others' emotions	0.212	0.052	0.769	0.444	-0.334	0.758			
	Utilization of emotions	0.124	0.030	0.480	0.632	-0.386	0.634			

Note: b = Gender, Highest playing level and Sports experience; c = Gender, Highest playing level and Sports experience and EI factors; *$p < 0.05$*

4. Discussion

This study aimed to uncover how emotions may indeed run differently across gender in EI and EmE among varsity sprinters. For this purpose, this study was comprised three major aims including the investigation of gender related disparities in EI and EmE scores among varsity sprinters and the evaluation of the predictors of EmE among varsity sprinters. The results revealed that the EmE behaviors were notably high among female varsity sprinters as compared to male varsity sprinters. Consistently, male varsity sprinters reported high scores on all components of EI than female varsity sprinters. Lastly, for the possible predictors of EmE behavior among varsity sprinters, gender remained the only significant predictor while confirming its dominant role in predicting EmE behaviors among varsity sprinters. These findings highlight the need for gender-specific interventions that may address emotional regulation strategies beyond general EI skills. In particular, female varsity sprinters, who may be more vulnerable to maladaptive eating patterns under competitive and academic stress must be given importance. The results of this study further showed that female varsity sprinters reported more EmE patterns than male athletes. This trend isn't entirely surprising, as similar outcomes have been found in previous research. For example, Du et al. (2022) pointed out that EmE was more commonly seen among female university students. Likewise, studies like Calderón-Asenjo et al. (2022) also noticed a similar pattern in young adult populations. One possible explanation could be that women tend to experience emotional intensity more deeply that might lead some of them to rely on food as a coping mechanism. Especially for varsity sprinters who have been juggling between both academic and athletic pressures. Adding to this, many female athletes may also experience several hormonal shifts and body image maintenance patterns. In environments where competition is intense and demands are high, turning to food for comfort may become a familiar for many female athletes. While this isn't true for everyone, it's a pattern that deserves more attention in psychological and sports science research.

Conversely, for EI factors, male varsity sprinters scored higher on all components of EI as compared to female varsity sprinters. This suggested that male varsity sprinters were reported to possess high EI scores than female varsity sprinters. These results are consistent with numerous studies conducted in the past on varsity athletes (Dumciene & Sipaviciene, 2021; Mercader-Rubio, Gutierrez Angel, et al., 2022). Illustratively, a study on gender-based variations in the EI levels among varsity students recommended that male varsity athletes were highly emotionally intelligent when compared to female counterparts (Dumciene & Sipaviciene, 2021). In a similar realm, Mercader-Rubio, Gutierrez Angel, et al. (2022) was also curious regarding the disparities of gender in the EI among varsity students. Therefore, for this purpose they conducted a descriptive study that was cross-sectional in design which revealed that EI was notably high in male students than females. The higher EI levels observed among male varsity sprinters may be attributed to greater exposure to competitive pressures that fosters emotional control and resilience. Additionally, societal norms may also often reward emotional composure in male athletes that might eventually reinforce the development of EI related skills. These factors collectively may contribute to enhanced emotional intelligence in male varsity sprinters. Although this study aimed to consider a variety of factors that might influence emotional eating (EmE) among varsity sprinters, gender stood out as the only one that truly made a difference. This finding falls in line with what previous research has pointed out. Women, across various populations, often report higher levels of EmE than men (Du et al., 2022; Dumciene & Sipaviciene, 2021). There may be a few reasons behind this. Emotional responsiveness tends to be more pronounced in females, and when you combine that with the ongoing pressure many of them feel around appearance, weight, and performance, it's not surprising that food sometimes becomes a coping tool (Sze et al., 2021). On the other hand, what stood out in our results was that emotional intelligence (EI), despite its theoretical connection to emotional control, didn't appear to have a clear link to EmE in this specific athletic group. That was unexpected, but it may be because EmE is shaped by a mix of deeper personal habits and traits, like how someone copes with stress, their self-image, or how much they practice self-compassion, none of which were directly assessed here. It seems likely that these other factors, if measured, could have told us more than EI did, and they might be worth exploring in future studies (Öztürk et al., 2024).

4.1. Implications

The findings produced from this study highlighted the importance of considering gender-specific emotional patterns when designing psychological interventions. They further suggest the incorporation of EI based interventions among female varsity sprinters to reduce maladaptive eating behaviors among them. In practical terms, coaches and sports psychologists could play a key role in helping female sprinters manage their emotions more effectively by designing specific emotional intelligence (EI) programs. To make these programs more accessible and relatable, they might include simple exercises such as writing personal reflections or practicing mindfulness techniques that might help athletes navigate stress and emotional ups and downs.

4.2. Limitations of the study

This study brings forward some valuable findings about how EI and EmE might vary between male and female varsity sprinters. That said, there are a few things to keep into consideration while interpreting these findings. Since the information was collected through self-reported questionnaires, some responses may have been shaped by how participants viewed themselves or what they remembered at the time. Secondly, we also had more male sprinters than female ones in our sample that could have un-balanced the gender-based comparisons. Lastly, due to the cross-sectional nature of the study that captures a snapshot at a single point in time, it did present us with the possible patterns of the variations and associations. However, it was unable to present the probable mechanisms or reasons behind these patterns.

4.3. Direction for Future Research

Looking ahead, future studies could take a closer look at how EI and EmE show up across different types of sports and levels of competition including gymnastics, combat sports and weight bearing competitions. It would also be worthwhile to explore how cultural background and training environments might shape these patterns. Additionally, exploring specific EI training programs may actually help athletes manage their emotions more effectively. Including gender-based analysis and even physiological measures could help paint a

clearer picture of how these emotional processes work. Although we didn't run a formal post hoc analysis in this study, we believe future research should consider testing interaction effects. For instance, by understanding how gender and EI might combine can aid to better understand the emotional challenges athletes face at competitive levels.

5. Conclusion

This study was aimed at exploring how EI and EmE might differ between male and female varsity sprinters. What stood out was that male athletes generally showed higher levels of EI levels, while their female counterparts were more likely to report EmE behaviors. Among all the variables examined, gender was the one factor that consistently showed a meaningful link with EmE. These findings highlight how important it is to recognize and understand gender-based emotional tendencies when thinking about psychological support or intervention for young athletes.

References

Alzoubi, H. M., & Aziz, R. (2021). Does emotional intelligence contribute to quality of strategic decisions? The mediating role of open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(2), 130.

Aronen, A., Kokkonen, M., & Hintsa, T. (2021). Association of emotional intelligence with resilience and work engagement in sports coaches. *Journal of Physical Education and Sport*, *21*(6), 3411-3419.

Barcın-Güzeldere, H. K., & Devrim-Lanpir, A. (2022). The association between body mass index, emotional eating and perceived stress during COVID-19 partial quarantine in healthy adults. *Public Health Nutrition*, *25*(1), 43-50.

Beisecker, L., Harrison, P., Josephson, M., & DeFreese, J. (2024). Depression, anxiety and stress among female student-athletes: a systematic review and meta-analysis. *British journal of sports medicine*, *58*(5), 278-285.

Bemanian, M., Mæland, S., Blomhoff, R., Rabben, Å. K., Arnesen, E. K., Skogen, J. C., & Fadnes, L. T. (2021). Emotional eating in relation to worries and psychological distress amid the COVID-19 pandemic: a population-based survey on adults in Norway. *International journal of environmental research and public health*, *18*(1), 130.

Ben-Zur, H. (2020). Transactional model of stress and coping. In *Encyclopedia of personality and individual differences* (pp. 5561-5564). Springer.

Bird, G. A., Quinton, M. L., & Cumming, J. (2021). Promoting athlete mental health: The role of emotion regulation. *Journal of Clinical Sport Psychology*, *17*(2), 112-130.

Bru-Luna, L. M., Martí-Vilar, M., Merino-Soto, C., & Cervera-Santiago, J. L. (2021). Emotional intelligence measures: A systematic review. Healthcare,

Bulut, S., Rostami, M., Hajji, J., Boltivets, S., Saadati, N., Yang, J., McDonnell, M., Chikwe, C., & William, E. A. (2024). Psychological and Social Factors Influencing Eating Behaviors in College Athletes. *Health Nexus*, *2*, 99-105.

Burnatowska, E., Surma, S., & Olszanecka-Glinianowicz, M. (2022). Relationship between mental health and emotional eating during the COVID-19 pandemic: A systematic review. *Nutrients*, *14*(19), 3989.

Calderón-Asenjo, R. E., Jalk-Muñoz, M. C., Calizaya-Milla, Y. E., Calizaya-Milla, S. E., Ramos-Vera, C., & Saintila, J. (2022). Association between emotional eating, sociodemographic characteristics, physical activity, sleep duration, and mental and physical health in young adults. *Journal of Multidisciplinary Healthcare*, 2845-2859.

Cecchetto, C., Aiello, M., Gentili, C., Ionta, S., & Osimo, S. A. (2021). Increased emotional eating during COVID-19 associated with lockdown, psychological and social distress. *Appetite*, *160*, 105122. https://doi.org/10.1016/j.appet.2021.105122

Chan, C.-C. (2023). The relationship among career self-efficacy, negative emotion regulation expectancies, coping, and emotional experience of college student athletes. *International Journal for Educational and Vocational Guidance*, 1-18.

Dakanalis, A., Mentzelou, M., Papadopoulou, S. K., Papandreou, D., Spanoudaki, M., Vasios, G. K., Pavlidou, E., Mantzorou, M., & Giaginis, C. (2023). The Association of Emotional Eating with Overweight/Obesity, Depression, Anxiety/Stress, and Dietary Patterns: A Review of the Current Clinical Evidence. *Nutrients*, *15*(5), 1173. https://doi.org/10.3390/nu15051173

Davies, H. E., Davies, R. J., Davies, C. W., & Group, B. T. S. P. D. G. (2010). Management of pleural infection in adults: British Thoracic Society Pleural Disease Guideline 2010. *Thorax*, *65 Suppl 2*(Suppl 2), ii41-53. https://doi.org/10.1136/thx.2010.137000

Dhivya, D. S., Hariharasudan, A., Ragmoun, W., & Alfalih, A. A. (2023). ELSA as an Education 4.0 Tool for Learning Business English Communication. *Sustainability*, *15*(4), 3809. https://doi.org/10.3390/su15043809

Du, C., Adjepong, M., Zan, M. C. H., Cho, M. J., Fenton, J. I., Hsiao, P. Y., Keaver, L., Lee, H., Ludy, M.-J., & Shen, W. (2022). Gender differences in the relationships between perceived stress, eating behaviors, sleep, dietary risk, and body mass index. *Nutrients*, *14*(5), 1045.

Dumciene, A., & Sipaviciene, S. (2021). The role of gender in association between emotional intelligence and self-control among university student-athletes. *International journal of environmental research and public health*, *18*(22), 11819.

Garaulet, M., Canteras, M., Morales, E., Lopez-Guimera, G., Sanchez-Carracedo, D., & Corbalan-Tutau, M. D. (2012). Validation of a questionnaire on emotional eating for use in cases of obesity: the Emotional Eater Questionnaire (EEQ). *Nutr Hosp*, *27*(2), 645-651. https://doi.org/10.1590/S0212-16112012000200043

Hatamnejad, M. R., Hosseinpour, M., Shiati, S., Seifaee, A., Sayari, M., Seyyedi, F., Lankarani, K. B., & Ghahramani, S. (2023). Emotional intelligence and happiness in clinical medical students: A cross-sectional multicenter study. *Health Sci Rep*, *6*(12), e1745. https://doi.org/10.1002/hsr2.1745

Khassawneh, O., Mohammad, T., Ben-Abdallah, R., & Alabidi, S. (2022). The relationship between emotional intelligence and educators' performance in higher education sector. *Behavioral Sciences*, *12*(12), 511.

Ljubicic, M., Matek Saric, M., Klarin, I., Rumbak, I., Colic Baric, I., Ranilovic, J., Dzelalija, B., Saric, A., Nakic, D., Djekic, I., Korzeniowska, M., Bartkiene, E., Papageorgiou, M., Tarcea, M., Cernelic-Bizjak, M., Klava, D., Szucs, V., Vittadini, E., Bolhuis, D., & Guine, R. P. F. (2023). Emotions and Food Consumption: Emotional Eating Behavior in a European Population. *Foods*, *12*(4), 872. https://doi.org/10.3390/foods12040872

Loturco, I., Fernandes, V., Bishop, C., Mercer, V. P., Siqueira, F., Nakaya, K., Pereira, L. A., & Haugen, T. (2023). Variations in Physical and Competitive Performance of Highly Trained Sprinters Across an Annual Training Season. *J Strength Cond Res*, *37*(5), 1104-1110. https://doi.org/10.1519/JSC.0000000000004380

Loturco, I., Pereira, L. A., Moura, T., McGuigan, M. R., & Boullosa, D. (2024). Effects of Different Conditioning Activities on the Sprint Performance of Elite Sprinters: A Systematic Review With Meta-Analysis. *Int J Sports Physiol Perform*, *19*(7), 712-721. https://doi.org/10.1123/ijspp.2024-0005

Mardiyah, S., Wandini, K., & Dwiyana, P. (2024). The relationship between stress, emotional eating, and nutritional status in adolescents. *Jurnal Gizi dan Dietetik Indonesia (Indonesian Journal of Nutrition and Dietetics)*, *12*(4), 252-261.

Mercader-Rubio, I., Angel, N. G., Ruiz, N. F. O., & Carrion Martinez, J. J. (2022). Emotional Intelligence and Its Relationship to Basic Psychological Needs: A Structural Equation Model for Student Athletes. *Int J Environ Res Public Health*, *19*(17), 10687. https://doi.org/10.3390/ijerph191710687

Mercader-Rubio, I., Gutierrez Angel, N., Oropesa Ruiz, N. F., & Sanchez-Lopez, P. (2022). Emotional Intelligence, Interpersonal Relationships and the Role of Gender in Student Athletes. *Int J Environ Res Public Health*, *19*(15), 9212. https://doi.org/10.3390/ijerph19159212

Miller, R. (2021). *The muscle morphology of sprinters* Loughborough University].

Mohammad, A. J. (2015). Human capital disclosures: Evidence from Kurdistan. *European Journal of Accounting Auditing and Finance Research*, *3*(3), 21-31.

Mohammad, A. J., & Ahmed, D. M. (2017). The impact of audit committee and external auditor characteristics on financial reporting quality among Malaysian firms. *Research Journal of Finance and Accounting*, *8*(13), 9-16.

Öztürk, M. E., Yılmaz, H. Ö., Tokaç Er, N., Doğan, G., Meriç, Ç. S., & Yabancı Ayhan, N. (2024). Factors associated with emotional eating in female college students. *Nutrition & Food Science*, *54*(5), 951-968.

Ragmoun, W. (2024). The Analysis of Trigger Factors of the Environmental Entrepreneurship Process in Saudi Arabia: An Innovative Approach. *Economies*, *12*(9), 254. https://doi.org/10.3390/economies12090254

Ragmoun, W., & Alfalih, A. A. (2024). Inclusive Special Needs Education and Happiness of Students with Physical Disabilities in Saudi Arabia: The Role of School Satisfaction and Self-Concept. *Education Sciences*, *14*(2), 209. https://doi.org/10.3390/educsci14020209

Rodriguez-Romo, G., Blanco-Garcia, C., Diez-Vega, I., & Acebes-Sanchez, J. (2021). Emotional Intelligence of Undergraduate Athletes: The Role of Sports Experience. *Front Psychol*, *12*, 609154. https://doi.org/10.3389/fpsyg.2021.609154

Shahan, M. F., Ali, A., & Rasool, M. (2023). Assessing emotional intelligence and academic performance among male field hockey varsity student athletes and non-athletes. *Journal of Development and Social Sciences*, *4*(3), 371-381.

Sze, K. Y., Lee, E. K., Chan, R. H., & Kim, J. H. (2021). Prevalence of negative emotional eating and its associated psychosocial factors among urban Chinese undergraduates in Hong Kong: a cross-sectional study. *BMC Public Health*, *21*, 1-10.

Thomas, C. L., & Heath, J. A. (2022). Using latent profile analysis to investigate emotional intelligence profiles in a sample of American university students. *Psychology in the Schools*, *59*(9), 1802-1824.

Thompson, K. M., Whinton, A. K., Ferth, S., Spriet, L. L., & Burr, J. F. (2021). Moderate load resisted sprints do not improve subsequent sprint performance in varsity-level sprinters. *The Journal of Strength & Conditioning Research*, *35*(1), 72-77.

Walker, S., von Bonsdorff, M., Cheng, S., Hakkinen, K., Bondarev, D., Heinonen, A., & Korhonen, M. T. (2023). Body composition in male lifelong trained strength, sprint and endurance athletes and healthy age-matched controls. *Front Sports Act Living*, *5*, 1295906. https://doi.org/10.3389/fspor.2023.1295906