CHRONIC SPORTS BETTING AND SOCIAL WELL-BEING IN YOUNG ADULTS: ROLES OF EMOTIONAL INTELLIGENCE AND SELF-REGULATION

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ABSTRACT: Online cross-sectional data were collected from a total of 300 undergraduate students sampled from a federal university in the Southeastern region of Nigeria to investigate the moderating roles of emotional intelligence and self-regulation in the relationship between chronic sports betting and social well-being. Contrary to our speculation, the results of the moderated regression analysis indicated that chronic sports betting was significantly and positively related to social well-being. Emotional intelligence and self-regulation significantly and positively impacted on social well-being. The results of the study also showed that emotional intelligence and self-regulation moderated the impact of chronic sports betting on social well-being. These findings suggest that context is important when the impact of chronic sports betting is discussed. Besides, emotional intelligence and self-regulation are effective intervention techniques that can improve social well-being despite chronic sports betting.

Keywords: Chronic Sports Betting, Emotional Intelligence, Self-Regulation, Social well-being

INTRODUCTION

The sudden rise in sports betting, especially among young adults, makes it imperative to pay attention to the health implications of this addictive behaviour. Previous studies have examined the relationship between problem sports betting and mental health and social well-being (e.g., Couture et al., 2024; Gathoni et al., 2021; Shaygan et al., 2024). Earlier research has also linked sports betting with a wide range of adverse outcomes, including developing difficulties with mental health and substance abuse (Scholes-Balog & Hemphill, 2012), higher healthcare costs (Effertz et al., 2018), poor family relationships (Shaw et al., 2007), financial difficulties (Hollenbeck et al., 2024) and poor stability (Muggleton et al., 2021). However, studies in Nigeria investigated sports betting and gambling passion and their impacts on a number of outcomes, including poor schoolwork engagement (e.g., Akinlosotu et al., 2019; Enwereuzor et al., 2016). Much of the previous evidence on the relationship between gambling and health outcomes is correlational (e.g., Couture et al., 2024), while others are qualitative (e.g., Eze & Igwe, 2024), making it difficult to understand when chronic sports betting relates to social well-being. Therefore, the current study attempts to illuminate this area of research. Specifically, previous studies have explored the outcomes of sports betting to individuals' well-being, but research that investigated the moderating roles of emotional intelligence and self-regulation in the relationship between chronic sports betting and social well-being in young adults is lacking.

Sharma (2011) posited that emotionally intelligent individuals have the capacity to effectively navigate their work environment, are effective in multi-tasking, can adjust priorities, adapt strategies and successfully attend to different emotional stimuli. Our interest in EI is due to its adaptive capabilities (Ugwu et al., 2021), yet a research area that has been profoundly neglected in non-Western-European environments such as in Nigeria. On the other hand, self-regulation refers to "the motivation and ability to monitor our responses, evaluate whether those responses match desired standards, and the energy needed to override unwanted urges when they crop up" (Van Tongeren et al., 2018, p. 98) can be related to goal attainment. Individuals who regulate their behaviour are more likely to observe rules that can enable them to lead a successful life, including maintaining social well-being. Given the difficult experience of chronic sports betting, which may hinder social well-being, effective interventions (such as developing self-regulation skills) are required to support young adults in achieving social well-being despite chronic sports betting. Since self-regulation is a recognised resource that can be a helpful intervention strategy to assist individuals in effectively managing themselves through difficult times, we have included it in our model in order to establish a dynamic equilibrium.

We intend to achieve these goals by drawing on the Self-Determination Theory (SDT; Ryan & Deci, 2000, 2017). According to the theory, typically, there are three mutually dependent basic psychological needs - autonomy, relatedness, and competence. These needs must be satisfied for a person to flourish and function in a healthy way. Autonomy refers to the need to self-regulate an individual's experiences and actions. Relatedness represents the need to feel socially connected and engaged. Competence is the need to feel efficient and skilful in one's efforts. These basic psychological needs are present in various motivation-based and emotional tasks (Reeve & Lee, 2019), including addictive behaviours (Volkow & Boyle, 2018). However, the frustration of these basic needs is related to behavioural addictions, including chronic sports betting and video gaming. According to the SDT, individual characteristics contribute to maladaptive outcomes through an increased frustration of these needs (Mills et al., 2020). Vansteenkiste and Ryan (2013) asserted that individuals with chronic need frustration are more likely to lack self-control and display oppositional defiance, which creates more frustration and ill-being. Studies have also indicated that basic psychological need satisfaction decreases the risks of gambling problems (Dennis et al., 2017). Tôth-Király et al. (2019) suggests that need satisfaction is a protective factor. Other factors such as Emotional Intelligence (EI) and self-regulation as reputable resources can also serve as protective factors against chronic sports betting on social well-being.

Emotional Intelligence (EI) is defined as the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others (Mayer et al., 2000). In the EI tradition, individual differences are studied with regard to how subjects identify, understand, express, regulate, and use their own emotions and those of others (Kopp & Jekauc, 2018). EI has grown exponentially over the past three decades in various disciplines (Keefer et al., 2018). A large body of studies highlighted the importance of EI as a predictor in important domains such as academic performance, job performance, leadership, stress, better health, and well-being (Keefer et al., 2018). Sports betting can result in significant emotional and psychological consequences; the highs of winning and the lows of losing can evoke intense emotions (Rick, 2023). Sport betting addiction can induce feelings of guilt, shame, and anxiety and the financial troubles arising from Sport betting can increase stress levels and contribute to

mental health issues (Rick, 2023). Individuals need to prioritize their mental well-being and seek help from professionals if they are grappling with the emotional or psychological aftermath of Sport betting.

Self-regulation is essential for maintaining healthy gambling behaviour by enabling individuals to set reasonable standards for their gambling and then track their actions in relation to these set goals (Rodda et al., 2018). In some instances, this may be a goal of non-gambling (Yi et al., 2019). In others, it may be a limit on the amount or time spent on gambling. Although self-imposed gambling limit is one of a diverse set of strategies that may be used to reduce gambling activities (Rodda et al., 2018), this strategy is of high interest since its specificity enables gamblers and researchers to judge whether self-regulation succeeded or failed in each gambling episode (Yi et al., 2019). In psychology, self-regulation is referred to two things, that is behavioural self-regulation and emotional self-regulation (Ackerman, 2018). Behavioural self-regulation, which is the ability to act in your long-term best interest, consistent with your deepest values, is what allows us to feel one way but act another (Stosny, 2011). Emotional self-regulation involves control of/or at least influence over your emotions (Ackerman, 2018).

Sports betting is one of the world's fastest-growing industries that has continued to attract millions of people who want to have fun and profit from their favourite sports legally (Fierstein, 2022). Sports betting is the activity of forecasting and predicting the result of sports matches or sports and placing a monetary stake or reward on it. Today, online betting is very common among the youths from the age of 15-40 years. Older people also engage in online betting (Mustapha & Enilolobo, 2019). Overindulging in online sports betting can have various adverse consequences, including anxiety and depression, reduced work productivity, financial difficulties, and strained relationships (Gainsbury, 2015). Concern has been raised about men's mental health and wellbeing because more and more people in various societies get involved in betting on sports through online sites (Mustapha & Enilolobo, 2019). Sports betting can easily become an addiction because the line between passion and obsession is usually very thin (Fierstein, 2022). This means that a little online sports betting can soon enough turn into an addiction that affects mood, health, and daily life (Fierstein, 2022).

Sports betting has posed serious problems to individuals and societies (Glozah et al., 2021). Individuals, especially the young ones, have become addicted to online sports betting. This is worrisome because students compromise their time for study and spend much of their time searching for football match fixtures. Koross (2016) stated that the youth have resorted to betting, and at times, they do so at the expense of their studies. The rise of sports betting is rapid and has recently become prevalent among students in institutions of higher learning. Most students spend a substantial amount of their time engaging in sports betting.

Theoretical background and hypotheses development

Chronic sports betting and social well-being

There has not been any consensus among scholars on the morality and rightness of sports betting, especially among the youth. Sports betting has been associated with some negative social and

health outcomes across individual, familial, and societal levels. For example, Masaba et al. (2016) reported that youths addicted to sports betting resigned from gainful employment and resorted to gambling, some of whom manifested significant health complications. The social impact of social cost may result in the breakup of social connections, such as social relationships and extended family, resulting in economic problems (Downs & Woolrych, 2010). As their gambling habits worsen, internet sports bettors' interactions with others, including family relatives, frequently deteriorate (Kerimu et al., 2022). This may result in domestic maltreatment (Delfabbro et al., 2009) and problem gambling (Reith & Dobbie, 2012). The Internet sports bettors seem powerless and are connected to identity, developing guilt and a sense of self-hatred (Yi & Kanetkar, 2010). Furthermore, it has been claimed that the lengths to which a sporting online gambler would go to conceal betting and the results of gambling may result to morally and legally questionable choices, such as committing a crime (Laursen et al., 2016). Shaygan et al. (2024) reported that individuals with problem sports betting reported higher scores on each index of mental health symptoms and also reported poorer well-being. Online sports betting has direct social and financial consequences to the local economy (Kerimu et al., 2022). Based on the above argument, we state that:

Hypothesis 1: Chronic sport betting negatively relates to social well-being of university undergraduate students.

Emotional intelligence as a moderator

Risky contexts are often characterised by a strong emotional charge, which drives our decisionmaking process and determines our final behaviour (Megías et al., 2015). Previous research suggests that emotional abilities could be protective factors against risk-taking (Sánchez-López et al., 2018). However, not all studies have yielded results that are compatible with this notion. Although the literature is still scarce and not sufficiently clear, the relationship between emotional abilities and risk behaviour seems to depend on the environment in which the behaviour occurs (Malinauskas et al., 2018; Sánchez-López et al., 2022; Vaughan et al., 2019). A substantial body of literature has related higher EI levels with numerous psychosocial benefits, such as greater life satisfaction and well-being (Villanueva et al., 2022; Xu et al., 2021), better physical and psychological health (GómezLeal et al., 2021; Jordana et al., 2020), higher professional and academic performance (Supervía & Bordás, 2018; Valente et al., 2020), and lower levels of aggressiveness (Gómez-Leal et al., 2020; Megías-Robles et al., 2021; Vega et al., 2021). We therefore speculate that:

Hypothesis 2: Emotional intelligence moderates the negative impact of chronic sports betting on social well-being.

Moderating role of self-regulation

Once a gambling-related goal has been cognitively set and activated, individuals will then evaluate their thoughts and their behaviour with respect to their goals (Yi et al., 2019). If gambling related behaviours are found to be discrepant in comparison to these goals, individuals may attempt to engage in self-regulation efforts in order to re-align with previously set goals (Quilty et al., 2017).

However, it appears that problem gamblers are substantially more likely to fail to regulate their gambling behaviour than non-problem gamblers (Moore et al., 2012). We therefore state that:

Hypothesis 3: Self-regulation moderates the negative impact of chronic sports betting and social well-being.

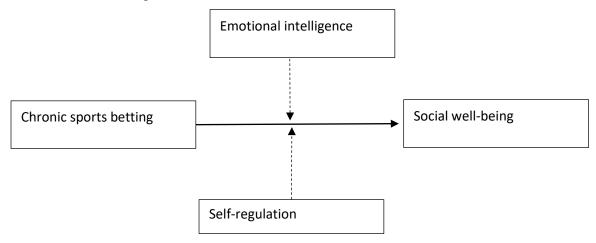


Figure 1. Conceptual model of the moderating roles of emotional intelligence and self-regulation on the relationship between chronic sport betting and social well-being.

METHOD

Participants and Procedure

Three hundred (300) undergraduate students of a federal university in the Southeastern region of Nigeria were used in conducting the research. In terms of gender, 198 females and 102 males participated in the study. The participants were predominantly Igbos of the Southeast geopolitical zone of Nigeria. Use of Google Form for online survey was used for data collection. The questionnaire copies were sent to various students' social media platforms, including WhatsApp platforms that were limited within the university environment. The researchers equally sent copies of the questionnaire as private messages to students. All the 300 participants completed the surveys, and they were all used for data analysis.

Instruments

The Problem Gambling Severity Index (PGSI; Ferris& Wynne, 2001), the Emotional Intelligence Scale (EQ-I; Salovey & Mayer, 1990), the Self-Regulation Scale (SRS; Schwarzer et al., 1999), and The Social well-being scale (SWBS; Ryff, 1989) were used as instruments for data collection,

The Problem Gambling Severity Index (PGSI) is the standardised measure of risk behaviour in problem gambling. It is a 9-item scale that measures problem gambling severity in adults. Participants are expected to respond with a 4-point Likert format that ranges from 0 = never,

sometimes = 1, most of the time = 2, and always = 3. Sample items are: "Have you bet more than you could really afford to lose?" and "Have you borrowed money or sold anything to gamble"? A higher score indicates a greater risk that one's gambling is a problem. The researchers established a Cronbach's alpha of .75 for the present study.

Emotional intelligence was measured with the Schutte Self-Report Emotional Intelligence Test (SSEIT). The SSEIT is structured based on the EI model by Salovey and Mayer (1990). The SSEIT model is closely associated with the EQ-I model of Emotional Intelligence. The SSEIT includes a 33-item self-report using a 1 (strongly disagree) to 5 (strongly agree) scale for responses. Some items in the scale are: "I have control over my emotions", "I seek out activities that make me happy". Ugwu et al. (2021) reported that Cronbach's α was .89, whereas the researchers found a Cronbach's alpha coefficient of .75 for the current study.

Self-regulation was measured with a 10-item Self-Regulation Scale (SRS; Schwarzer et al., 1999), a measure that assesses an individual's ability to keep their focus when pursuing a goal and facing difficulties in achieving the goal. Sample item is: "I can control my thoughts from distracting me from the task at hand". Each item is rated on a 4-point scale ranging from 1 (not at all true) to 4 (completely true). Responses are summed into a total score, with higher scores indicating greater ability to control and maintain one's attention. Ugwu et al. (2023) reported a Cronbach's alpha of .77 in their study, whereas a Cronbach's alpha of .77 was established for the current study.

The Social Well-Being Scale (Keyes, 1998) was adopted to assess the nature of a well-lived life. It is a 10-item version with 2 items for each dimension. Participants were instructed to indicate the extent to which they agreed with the items ranging from 1 = (exceedingly disagree) to 7 = (exceedingly agree). Sample items are: "I lead a purposeful and meaningful life" and "My social relationships are supportive and rewarding". The researchers established a Cronbach's alpha of .89 for the current study.

RESULTS

	Constructs	Μ	SD	1	2	3	4
1	Chronic Sports betting	12.84	3.66				
2	Self-regulation	24.90	7.34	$.28^{**}$			
3	Emotional intelligence	27.05	6.69	.32**	.57**		
4	Well-being	27.40	7.69	.25**	.56**	.51**	

Table 1: Descriptive and correlation matrix

Note: ** *p* <.001

The correlational analysis revealed several significant relationships in examining the relationships among chronic sports betting, self-regulation, emotional intelligence, and well-being (see Table 1). Specifically, chronic sports betting was positively correlated with self-regulation (r = .28, p < .01), emotional intelligence (r = .32, p < .01), and well-being (r = .25, p < .01). Furthermore, self-regulation showed a strong positive correlation with both emotional intelligence (r = .57, p < .01)

and well-being (r = .56, p < .01). Lastly, emotional intelligence was positively correlated with well-being (r = .51, p < .01).

Table 2:	Regression	Analysis	Predicting	well-being
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Model	В	SE	t	р	LLCI	ULCI
Chronic Sports Betting	.19	.05	3.86	.001	.092	.281
Emotional Intelligence	.30	.03	9.75	.001	.238	.358
Int_1 (CSB x EI)	03	.05	-5.20	.001	045	020
Self-regulation	.39	.03	14.27	.001	.339	.446
Int_2 (CSB x SR)	01	.01	-1.98	.048	022	.000

Note: $CSB = Chronic Sports Betting, EI = Emotional Intelligence, SR = Self-regulation, Int_1 = Chronic Sports Betting x Emotional Intelligence, Int_2 = Chronic Sports Betting x Self-regulation.$

The regression analysis revealed that the model significantly predicted the dependent variable, F(5, 1322) = 176.755, p < .001, R² = .401. Chronic sports betting (B = .19, p < .001), emotional intelligence (B = .30, p < .001), and self-regulation (B = .39, p < .001) were all significant predictors, indicating positive relationships with the dependent variable. There is a significant negative interaction effect observed for chronic sports betting x emotional intelligence (B = -.03, p < .001) and chronic sports betting x self-regulation (B = -.01, p = .048).

Table 3: Tests of highest-order	unconditional interactions
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	R2-chng	F	df1	df2	р
X*W	.012	27.004	1.000	294	.000
X*Z	.002	3.923	1.000	294	.048
BOTH	.033	36.900	2.000	294	.000

Note: X= *Chronic Sports Betting, W* = *Emotional Intelligence, Z* = *Self-regulation*

Table 4: Conditional effects of chronic sports betting on values of emotional intelligence and Self-regulation

Emotional intelligence	Self-regulation	Effect	se	t	р	LLCI	ULCI
Low	Low	.484	.064	7.529	.000	.358	.610
Low	Mean	.403	.066	6.079	.000	.273	.533
Low	High	.322	.090	3.597	.000	.146	.498
Mean	Low	.268	.065	4.108	.000	.140	.395
Mean	Mean	.186	.048	3.859	.000	.092	.281
Mean	High	.105	.061	1.713	.087	015	.226
High	Low	.051	.088	.577	.564	123	.225
High	Mean	030	.061	492	.623	150	.090
High	High	111	.055	-2.023	.043	219	003

The analysis of the highest-order unconditional interactions indicated significant effects (see Table 3). Specifically, the interaction between emotional intelligence and self-regulation significantly improved the model, $\Delta R^2 = .012$, F(1, 1322) = 27.004, p < .001. Similarly, the interaction between emotional intelligence and self-regulation was significant, though the change in R² was smaller, $\Delta R^2 = .002$, F(1, 1322) = 3.923, p = .048. When both interactions were included, they significantly contributed to the model, $\Delta R^2 = .033$, F(2, 1322) = 36.900, p < .001.

For the conditional effects of chronic sports betting at different levels of emotional intelligence and self-regulation, the effect was strongest and positive at low levels of emotional intelligence and self-regulation (B = .484, p < .001) and weakened as the levels of either emotional intelligence or self-regulation increased. Notably, the effect turned negative and remained significant at high levels of emotional intelligence and self-regulation (B = .111, p = .043). See Figure 2.

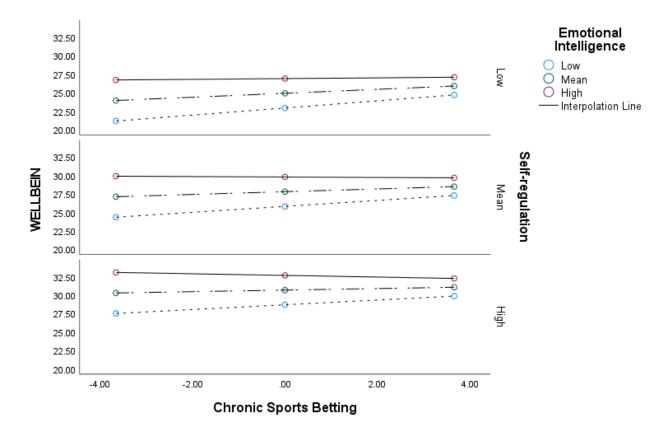


Figure 2: Interaction graph of emotional intelligence, self-regulation, chronic sporting betting, and well-being.

DISCUSSION

The study examined the moderating role of emotional intelligence and self-regulation on the impact of chronic sports betting on social well-being among young adults. The results of the study indicated that chronic sports betting impacts positively on social well-being. This finding is contrary to our hypothesis 1, which stated that chronic sports betting negatively relates to the social

well-being of university undergraduate students. The reason for this finding could be that these games appear to represent personal and social rewards or often offer bettors a chance of winning (Binde, 2013). Even when they do not win, the hope that they will win in the next bet can sustain their betting behaviour. This expectation tends to create a good feeling and may explain the reason chronic sports betting is positively related to social well-being. However, the dearth of employment opportunities in Nigeria has made sports betting a safe haven for the youths, most of whom have made a living from sports betting. It is, therefore, not surprising that chronic sports betting impacted positively on the social well-being of young adults. This finding is in line with previous studies (e.g., Gathoni et al., 2021; Mustapha & Enilolobo, 2019), which found a positive and significant association between gambling severity and social well-being and that betting has become a new occupation for unemployed Nigerian youth. Conversely, the finding disagrees with several previous research which suggested that there is a high risk for personal, social, and financial problems with increased betting (e.g., Buono et al., 2020).

The results of the study also show that there is a significant negative moderation effect observed for chronic sports betting and emotional intelligence on social well-being. Specifically, the introduction of emotional intelligence improves the impact of chronic sports betting on social well-being. This finding is also in line with H2. This further underscores the notion that emotional intelligence is a resource that enhances positive behaviours. This finding tends to agree with

The results of the study further indicated that self-regulation improved the impact chronic sports betting has on social well-being. This finding supports the third hypothesis, which states that self-regulation moderates a positive impact of chronic sport betting on social well-being. This finding has underscored the adaptive capabilities of self-regulation. This finding could be explained by the motivating potentials of the resources dimension of the JD-R theory, which postulates that personal resources (e.g., self-regulation) can buffer the impact of chronic sports betting on social well-being. The finding appears to agree with earlier research, which reported that low self-regulators adopt poor attention approaches, are depressed and are also exposed to burnout (Zheng et al., 2022).

Implications of the findings

The findings from this study revealed that chronic sports betting, emotional intelligence, and selfregulation significantly impacted well-being and also that emotional intelligence and selfregulation moderate the relationship between chronic sports betting and social well-being. Emotional intelligence is a positive construct that allows one to understand and manage their emotions in order to self-motivate and create positive social interaction. it will be beneficial in building relationships, defusing conflict, job satisfaction, better communication and playing a role in the success of mental and physical health. Self-regulation which involves self-restriction, regulating of reactions and emotions, being able to focus on a task and control of impulses which will aid in reduction on chronic sport betting and improvement on well-being. Since EI and selfregulation can be improved with appropriate training (Gilar-Corbi et al., 2019; Iodice et al., 2022; Mattingly & Kraiger, 2019), management can recommend EI and self-regulation training for students. These training advances individual's EI and self-regulation levels, which has the capacity to regulate their emotions (Meisler et al., 2020). The results of this study can be important in

framing policies that can help mental health professionals in managing acute sports betting behaviours.

Limitations of the study and directions for future research

There are a few limitations that need to be highlighted, which should be kept in mind in drawing inferences for the current study. First, is the problem associated with self-report with its problem of social desirability variance. Future studies should collect data from other sources, such as colleagues, to cushion the effect of spurious data given by single sources. This would improve the validity of the results. More so, a bidirectional relationship might be possible in our study but was not able to be identified. This is to say that, for example, emotional intelligence may be related to chronic sports betting. Another limitation is the one associated with cross-sectional data with its inability to establish causation. Future research should adopt a longitudinal design to be able to establish causation. The longitudinal design may also help to keep bidirectional results in check.

Conclusion

In summary, chronic sports betting, emotional intelligence, and self-regulation significantly and positively predicted social well-being. The intriguing and unexpected aspect of the was that chronic sports betting positively predicted social well-being in young adults. Although this finding is counterintuitive, the reason for this result is not far-fetched. Most young adults in Nigeria now see sports betting as an alternative to finding employment and are very comfortable doing it. Emotional intelligence and self-regulation significantly moderated the relationship between chronic sports betting and social well-being. These results should take into consideration when making policies and treatment/management of chronic sports betting, especially in young adults.

REFERENCES

- Ackerman, C. E. (2018). *What is self-regulation?* <u>https://postivepsychology.com/team/courtney-Ackerman</u>
- Akinlosotu, N. T., Imandojemu, K., & Aina B. J. (2019). Sports betting and Nigerian youths: A study of sports betting in Edo State. *International Journal of Business Marketing and Management*, 4(9), 23-35.
- Binde, P. (2013). Why people gamble: A model with five motivational dimensions. *International Gambling Studies*, *13*(1), 81–97. <u>https://doi.org/10.1080/14459795.2012.712150</u>
- Buono, F. D., Paul, E., Sprong, M. E., Smith, E. C., Garakani, A., & Griffiths, M. D. (2020). Gaming and gaming disorder: A mediation model gender, salience, age of gaming onset, and time spent gaming. *Cyberpsychology, Behavior, and Social Networking*, 23(9), 647– 651. <u>https://doi.org/10.1089/cyber.2019.0445</u>

- Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, *3*(2), 110–126. <u>https://doi.org/10.1111/j.1754-</u> <u>9434.2010.01231.x</u>
- Couture, C., Cross, J., & Wu, S. (2024). Impact of sports gambling on mental health. <u>*Economics*</u> <u>*Letters*</u>, 243, 111922. <u>https://doi.org/10.1016/j.econlet.2024.111922</u>
- Delfabbro, P., Lambos, C., King, D., & Puglies, S. (2009). Knowledge and beliefs about gambling in Australian secondary school students and their implications for education strategies. *Journal of Gambling Studies*, 25(4), 523-539. <u>https://doi.org/10.1080/026404101300149348</u>
- Dennis, C. B., Davis, T. D., Chang, J., & McAllister, C. (2017). Psychological vulnerability and gambling in later life. *Journal of Gerontological Social Work*, 60(6–7), 471–486. https://doi.org/10.1080/01634372.2017.1329764
- Downs, C., & Woolrych, R. (2010). Gambling and debt: The hidden impacts on family and work life. *Community, Work & Family, 13*(3), 311–328. https://doi.org/10.1080/13668803.2010.488096
- Enwereuzor, I. K., Ugwu, L. I., & Ugwu, D. I. (2016). Role of smartphone addiction in gambling passion and schoolwork engagement: A dualistic model of passion approach. *Asian Journal of Gambling Issues and Public Health*, 6(1), 9. <u>https://doi.org/10.1186/s40405-016-0018-8</u>
- Eze, O. E., & Igwe, P. B. (2024). The influence of sports betting on the psychological wellbeing of youths in Abakaliki metropolis: A qualitative approach. *African Journal for the Psychological Study of Social Issues, 27*(3), 1-12.
- Ferris, J., & Wynne, H. (2001). *The Canadian problem gambling index: Final report*. Ottawa: Canadian centre on substance abuse.
- Fierstein, J. (2022). *How does online sports betting impact your mental health? phoenix men's counseling.* https://www.phoenixmenscounseling.com.
- Gainsbury, S. M., Hing, N., Delfabbro, P. H., & King, D. L. (2014). A taxonomy of gambling and casino games via social media and online technologies. *International Gambling Studies*, *14*, 196–213. <u>https://doi.org/10.1080/1091367X.2017.1405811</u>.
- Gathoni, B. N., Munayi, S., Wanjira, J., & Inyega, J. (2021). Investigating the effects of online sports betting on the perceived social wellbeing of student athletes. *Business Ecosystem & Strategy*, *3*(2), 62-67. <u>http://dx.doi.org/10.36096/ijbes.v3i2.259</u>
- Gilar-Corbi, R., Pozo-Rico, T., Sánchez, B., & Castejón, J. L. (2019). Can emotional intelligence be improved? A randomized experimental study of a business-oriented EI training

program for senior managers. *PloS one*, *14*(10), e0224254. https://doi.org/10.1371/journal.pone.0224254

- Glozah, F. N., Tolchard, B., & Pevalin, D. J. (2021). Participation and attitudes towards gambling in Ghanaian youth: An exploratory analysis of risk and protective factors. *International Journal of Adolescent Medicine and Health*, 33(4), 20180175. <u>https://doi.org/10.1515/ijamh-2018-0175</u>
- Gómez-Leal, R., Megías-Robles, A., Gutiérrez-Cobo, M. J., Cabello, R., & Fernández-Berrocal, P. (2020). Personal risk and protective factors involved in aggressive behavior. *Journal of Interpersonal Violence*, 37, 3–24. <u>https://doi.org/10.1177/0886260520926322</u>
- Hing, N., Russel, A. M. T., Lamont, M., & Vitartas, P. (2017). Bet anywhere, anytime: An analysis of internet sports bettors' responses to gambling promotions during sports broadcasts by problem gambling severity. *Journal of Gambling Studies*, 33(4), 1051-1065. <u>https://doi.org/10.1080/026404102320675602</u>
- Iodice, P., Cannito, L., Chaigneau, A., & Palumbo, R. (2022). Learned self-regulation in toplevel managers through neurobiofeedback training improves decision making under stress. *Scientific Reports*, 12(1), 6127. <u>https://doi.org/10.1038/s41598-022-10142-x</u>
- Jordana, O. O., Espinoza, G. P., González, G. M., Subiza, P. I., Becerra, C. A., Raich, E. R. M., & Mora, G. M. S. (2020). Universal prevention program of eating, weight and body image problems in adolescents: A 12-month follow-up. *Psicothema*, 32(2), 204–213. <u>https://doi.org/10.7334/psicothema2019.296</u>
- Keefer, K. V., Parker, J. D. A., & Saklofske, D. H. (2018). *Emotional intelligence in education*. *integrating research with practice*. Springer: Cham.
- Kerimu, I. J., Dennis, O. D., Godfrey, C. N., Tochi, E. I., & Omolola, J. A. (2022). Social predictors of sports betting among youths in Ilorin, Kwara state, Nigeria. *Journal of Physical Education & Health*, 11(20), 23-32. <u>https://doi.org/10.5281/zenodo.8079785</u>.
- Keyes, C. L. M. (1998). *Social Well-Being Scale*. APA PsycTests. https://doi.org/10.1037/t13598-000
- Kopp, A., & Jekauc, D. (2018). The influence of emotional intelligence on performance in competitive sports: A meta-analytical investigation. *Sports*, 6(4), 175. <u>http://dx.doi.org/10.3390/sports6040175</u>
- Koross, R. (2016). University students gambling: Examining the effects of betting on Kenyan university students' behaviour. *International Journal of Liberal Arts and Social Sciences* 4(8), 57-66. <u>https://doi.org/10.1155/2018/7058105</u>.

- Laursen, B., Plauborg, R., Ekholm, O., Larsen, C. V. L., & Juel, K. (2016). Problem gambling associated with violent and criminal behaviour: A Danish population-based survey and register study. *Journal of Gambling Studies*, *32*, 25–34 (2016). https://doi.org/10.1007/s10899-015-9536-z
- Masaba, A., Sekakubo, J., Blaszczynski, A., & Kuka, W. (2016). The Social-economic impact of sport betting on Ugandan youths. *Global Advanced Research Journal of Social Sciences*, 5(1) 20-26. <u>https://doi.org/10.5172/mra.2012.6.3.192</u>
- Mattingly, V., & Kraiger, K. (2019). Can emotional intelligence be trained? A meta-analytical investigation. *Human Resource Management Review*, 29(2), 140-155, doi:10.1016/j.hrmr.2018.03.002
- Mayer J.D., Salovey P., Caruso D.R. (2000). Models of emotional intelligence. In Sternberg R. J (Ed.), Handbook *of Intelligence* (pp. 396–420). Cambridge University Press.
- Megías, A., Navas, J. F., Petrova, D., Cándido, A., Maldonado, A., GarciaRetamero, R., & Catena, A. (2015). Neural mechanisms underlying urgent and evaluative behaviours: An fMRI study on the interaction of automatic and controlled processes. *Human Brain Mapping*, *36*(8), 2853–2864. <u>https://doi.org/10.1002/hbm.22812</u>
- Megías-Robles, A., Gómez-Leal, R., Gutiérrez-Cobo, M. J., Cabello, R., & Fernández-Berrocal, P. (2021). The role of sensitivity to reward and punishment in aggression. *Journal of Interpersonal Violence*, 1–26. <u>https://doi.org/10.1177/0886260520986275</u>
- Mills, D. J., Li Anthony, W., & Nower, L. (2020). General motivations, basic psychological needs, and problem gambling: Applying the framework of Self-Determination Theory. *Addiction Research & Theory*, 29(2), 175–182. https://doi.org/10.1080/16066359.2020.1787389
- Moore, S., Thomas, A. C., Kyrios, M., & Bates, G. (2012). The self-regulation of gambling. *Journal of Gambling Studies*, 28(3), 405-420. <u>https://doi.org/10.1016/.08.012</u>.
- Mustapha, S., A. & Enilolobo, O. (2019). Effects of gambling on the welfare of Nigerian Youths: A case study of Lagos State. *Journal of Gambling Issues, 43*. <u>https://doi.org/10.4309/JGI.2019.43.3</u>
- Quilty, L. C., Watson, C., Toneatto, T., & Bagby, R. M. (2017). A prospective Investigation of affect, the desire to gamble, gambling motivations and gambling behavior in the mood disorders. *Journal of Gambling Studies*, 33(1), 115-129. <u>https://doi.org/10.1080/10413200305392</u>
- Reeve, J., & Lee, W. (2019). A neuroscientific perspective on basic psychological needs. *Journal* of Personality, 87(1), 102–114. <u>https://doi.org/10.1111/jopy.12390</u>

- Reith, G., & Dobbie, F. (2012). Lost in the game: Narratives of addiction and identity in recovery from problem gambling. *Addiction Research & Theory*, 20(6), 511-521. https://doi.org/doi.org/10.5172/mra.2012.6.3.192
- Rick, B. (2023). *The dangers of online gambling: Stay informed. Gambling Addiction Blog.* <u>https://www.algamus.org/blog/why-online-gambling-is-dangerous</u>
- Rodda, S. N., Bagot, K. L., Cheetham, A., Hodgins, D. C., Hing, N., & Lubman, D. I. (2018). Types of change strategies for limiting or reducing gambling behaviors and their perceived helpfulness: A factor analysis. *Psychology of Addictive Behaviors, 32*(6), 679-688. <u>https://doi.org/10.1080/02640411003797157</u>
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *The American Psychologist*, *1*, 68–78.
- Ryan, R. M., & Deci, E. L. (2017). Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness. The Guilford Press.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081. <u>http://dx.doi.org/10.1037/0022-3514.57.6.1069</u>
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211. <u>https://doi.org/10.2190/DUGG-P24E-52WK-6CDG</u>
- Sánchez-López, M. T., Fernandez-Berrocal, P., Gómez-Leal, R., & MegíasRobles, A. (2022). Evidence on the relationship between emotional intelligence and risk behavior: A systematic and meta-analytic review. *Frontiers in Psychology*, 13, 1–13. <u>https://doi.org/10.3389/fpsyg.2022.810012</u>
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177. <u>https://doi.org/10.1016/S0191-8869(98)00001-4</u>
- Schwarzer, R., Diehl, M., & Schmitz, G. S. (1999). *Self-regulation scale*. https://www.fu-berlin.de/gesund/skalen.
- Shaygan, A., Lambuth, J., Song, F., Hurtado, M., Lostutter, T. W., & Graupensperger, S. (2024). More than fun and games: Problematic sports betting and its adverse impact on mental health and well-being in young adults. *Psychiatry Research*, 342, 116258. <u>https://doi.org/10.1016/j.psychres.2024.116258</u>

- Stosny, S. (2011). *Self-regulation. Psychology Today*. <u>https://www.psychologytoday.com/us/blog/anger-in-the-age-entitlement/201110/self-regulation</u>.
- Tôth-Király, I., Bőthe, B., Márki, A. N., Rigó, A., & Orosz, G. (2019). Two sides of the same coin: The differentiating role of need satisfaction and frustration in passion for screenbased activities. *European Journal of Social Psychology*, 49(6), 1190–1205. <u>https://doi.org/10.1002/ejsp.2588</u>
- Ugwu, F. O., Okeja, U., Nnadozie, E. E., Ugwu, L. E., Areji, A. C., & Onyishi, I. E. (2023). Who cares about time? Investigating personality and self-regulation in the relationship between religiosity and punctuality in Nigerian public service organizations. *Journal of Social Service Research*, 49(2), 161-178. : <u>https://doi.org/10.1080/01488376.2023.2201303</u>
- Ugwu, F. O., Onyishi, I. E., & Anyaegbunam, E. N., & Ugwu, L. E. (2021). Emotions at work: Implications for psychological well-being of prison officers in Nigeria. *International Journal of Work Organization and Emotion*, 12(1), 64-85. http://dx.doi.org/10.1504/IJWOE.2021.10037982
- Valente, S., Lourenco, A., Alves, P., & Dominguez-Lara, S. (2020). El papel de la inteligencia emocional del profesor para la eficacia y la gestión del aula. *Revista CES Psicologia*, 13(2), 18–31. <u>https://doi.org/10.21615/cesp.13.2.2</u>.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263–280. <u>https://doi.org/10.1037/a0032359</u>
- Van Tongeren, D. R., DeWall, C. N. Green, J. D. Cairo, A. H.Davis, D. E., & Hook, J. N. (2018). Self-regulation facilitates meaning in life. *Review of General Psychology*, 22(1), 95–106. <u>https://doi.org/10.1037/gpr0000121</u>
- Vaughan, R., Laborde, S., & McConville, C. (2019). The effect of athletic expertise and trait emotional intelligence on decision-making. *European Journal of sport science*, 19(2), 225–233. <u>https://doi.org/10.1080/17461391.2018.1510037</u>.
- Vega, A., Cabello, R., Megías-Robles, A., Gómez-Leal, R., & FernándezBerrocal, P. (2021). Emotional intelligence and aggressive behaviors in adolescents: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 1–11. <u>https://doi.org/10.1177/1524838021991296</u>.
- Villanueva, L., Prado-Gascó, V., & Montoya-Castilla, I. (2022). Longitudinal analysis of subjective well-being in preadolescents: The role of emotional intelligence, self-esteem and perceived stress. *Journal of Health Psychology*, 27(2), 278–291. <u>https://doi.org/10.1177/1359105320951605</u>.

- Volkow, N. D., & Boyle, M. (2018). Neuroscience of addiction: Relevance to prevention and treatment. American Journal of Psychiatry, 175(8), 729–740. <u>https://doi.org/10.1176/appi.ajp.2018.17101174</u>
- Xu, X., Pang, W., & Xia, M. (2021). Are emotionally intelligent people happier? A meta-analysis of the relationship between emotional intelligence and subjective well-being using Chinese samples. Asian Journal of Social Psychology, 24(4), 477–498. <u>https://doi.org/10.1111/ajsp.12445</u>.
- Yi, S., & Kanetkar, V. (2010). Implicit measures of attitudes toward gambling: an exploratory study. *Journal of Gambling Issues*, 24, 140-163. <u>https://doi.org/10.1111/j.1749-6632.1999.tb08125.x</u>
- Yi, S., Goldstein, A., & Lu, H. (2019). *A daily diary investigation of self-regulation in gambling*. https://www.manitoba gambling research program.
- Zheng, Y., Gu, X., Jiang, M., & Zeng, X. (2022). How might mindfulness-based interventions reduce job burnout? Testing a potential self-regulation model with a randomized controlled trial. *Mindfulness*, 13(8), 1907–1922. <u>https://doi.org/10.1007/s12671-022-01927-2</u>