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Psychological Effects of Pickleball on Mood, Anxiety, and Self-Esteem among University Personnel

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ABSTRACT

This study examined the psychological effects of playing pickleball on mood, anxiety, and self-esteem among personnel at Bohol Island State University, Main Campus, during the second quarter of 2024. Using a descriptive correlational design and purposive sampling, data were collected from 28 participants through a validated survey questionnaire. Descriptive statistics and Pearson's correlation were applied to analyze the findings. Results revealed that playing pickleball significantly improved mood, emotional balance, and overall well-being, while also reducing anxiety and stress by promoting relaxation and calmness. Furthermore, it positively influenced self-esteem through enhanced confidence, accomplishment, and self-worth. Correlation analysis showed strong associations between mood, anxiety reduction, and self-esteem, emphasizing the importance of emotional well-being as a pathway to improved mental health. However, general psychological benefits were not directly linked to these outcomes. The study highlights pickleball as a valuable workplace wellness activity and suggests further research on diverse populations and participation levels.

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1. INTRODUCTION

The psychological benefits of engaging in physical activities such as pickleball have garnered increased attention, particularly for individuals working in high-stress environments. Research supports the idea that recreational activities, including racquet sports like pickleball, can provide both immediate and long-term mental health benefits. Pickleball, a sport that combines elements of tennis, badminton, and ping pong, is uniquely designed to offer both a social and physical outlet. Studies have shown that regular participation in physical activities can stimulate the release of endorphins, neurotransmitters associated with improved mood and euphoria, which contribute to a heightened sense of well-being and emotional balance (Reed & Ones, 2006). Engaging in such activities can offer a much-needed respite from daily stressors and provide individuals with a more positive outlook, especially in the context of the workplace.

Furthermore, the social nature of pickleball enhances its psychological benefits. Participation in team sports fosters a sense of community and belonging, which has been shown to reduce feelings of isolation, a common contributor to workplace anxiety and stress. In particular, when employees engage in group activities like pickleball, they often experience a sense of camaraderie that extends beyond the confines of their work tasks (Calixtro Jr, 2025). This sense of connection can act as a powerful antidote to workplace anxiety, which is often exacerbated by demanding workloads and the pressure to meet performance expectations (Steptoe, 2010). The collaborative aspect of pickleball, where players rely on one another for success, not only provides an opportunity to build social relationships but also helps alleviate anxiety by promoting positive interaction and mutual support.

Moreover, pickleball offers participants an opportunity to develop new skills, which can contribute to improvements in self-esteem and self-efficacy. Mastering the techniques of the sport, from the basic footwork to the finer details of strategy, provides a tangible sense of accomplishment. Individuals who experience success in activities they undertake are more likely to develop a strong belief in their abilities, which translates into higher levels of self-esteem (Bandura, 1997). In the case of personnel, particularly those in high-stress or competitive environments, having a constructive outlet to experience mastery can improve resilience, making them better equipped to handle work-related challenges (Calixtro Jr, 2024). The psychological benefits of skill acquisition in physical activity are particularly valuable in fostering a sense of competence and control, which are often undermined by the pressures of modern work environments.

While physical activity is known to benefit mental health, there is limited research on the specific psychological effects of pickleball, particularly for individuals in high-stress jobs. Given pickleball's unique blend of low-impact exercise and mental engagement, it may offer distinct benefits for mood, anxiety, and self-esteem. Further studies are needed to explore its potential role in reducing workplace stress and enhancing psychological resilience, especially within employee wellness programs. By examining these relationships, researchers could provide actionable insights into how organizations can implement strategies that support employee mental health and overall productivity (Vasilenko et al., 2019). In the long run, such studies could contribute to a more holistic understanding of workplace wellness and offer practical recommendations for cultivating a healthier, more resilient workforce.

While the general benefits of physical activity for mental health are well established, limited research has examined the specific psychological effects of pickleball, especially among personnel in workplace settings. Given its unique blend of low-impact exercise, social interaction, and skill development, pickleball may provide distinct advantages in enhancing

mood, reducing anxiety, and fostering self-esteem. This study therefore aims to investigate the psychological effects of playing pickleball on personnel at Bohol Island State University, focusing on its contribution to mood, anxiety, and self-esteem. The novelty of this research lies in addressing the gap on pickleball as a workplace wellness strategy, offering new insights into how recreational sports can be integrated into organizational health programs. Its findings are expected to contribute to the development of evidence-based approaches that promote mental well-being, resilience, and productivity among university personnel.

2. METHODS

With the growing interest in physical activities that enhance well-being, this study delves into the impact of a popular sport on mental health. This research utilized a descriptive correlational design to establish the correlation between the psychological advantages of playing pickleball and the mood, anxiety, and self-esteem of staff during the second quarter of the year 2024 at Bohol Island State University, Main Campus, Tagbilaran, Bohol, Philippines. The main objective was to relate the psychological advantages of playing pickleball to the mood, anxiety, and self-esteem of the staff. The respondents were chosen by purposive sampling, with 28 active staff members who participated in pickleball sessions regularly (Etikan *et al.*, 2016). Data were collected by an adapted survey questionnaire, which assessed the identified variables. The questionnaire was adapted and validated from available instruments employed in comparable physical education and sports psychology research.

After collecting data, the findings were statistically evaluated based on descriptive statistics, that is, the mean and standard deviation (SD), to represent the psychological advantages and the levels of mood, anxiety, and self-esteem of the staff. To explore the connection between the psychological advantages of playing pickleball and the levels of mood, anxiety, and self-esteem, Pearson's product-moment correlation coefficient was utilized.

In addition, before carrying out the study, ethical clearance was sought. The participants were well briefed about the purpose and extent of the study, and volunteering to participate was entirely voluntary (Adekola, 2020). Informed consent was also sought from all the respondents. Confidentiality and anonymity were ensured throughout the research, and the data gathered were employed solely for academic research purposes.

3. RESULTS AND DISCUSSION

The data presented in **Table 1** revealed the psychological benefits personnel experienced from playing pickleball. The mean scores indicated a generally positive response, suggesting that pickleball contributed to improved mental well-being. Respondents strongly agreed with the statements about feeling mentally refreshed, with a mean score of 4.11, experiencing an improved mood with a mean score of 4.71, and benefiting from emotional balance with a mean score of 4.25 after playing pickleball. These findings aligned with existing research showing that physical activities, particularly sports, could positively impact mood regulation and mental clarity (Hwang *et al.*, 2021). The strong mean values for statements about lasting effects on mindset, with a mean score of 3.64, and improved focus with a mean score of 3.71, also suggested that these benefits extended beyond the time of activity, highlighting the long-term psychological effects of pickleball (López-Bueno *et al.*, 2020). Notably, while the statement regarding lasting psychological benefits throughout the day, with a mean score of 3.39, received a neutral response, the overall pattern suggested that pickleball offered meaningful and consistent mental health benefits. The total mean score of 4.09 supported

the conclusion that personnel perceived pickleball as a significant contributor to their overall well-being.

The data from this study aligned with broader literature on the psychological benefits of exercise. For example, physical activities such as pickleball have been shown to improve mood, reduce stress, and enhance cognitive function (Janssen & LeBlanc, 2019). Furthermore, consistent participation in recreational sports was linked to better emotional regulation and overall psychological resilience (Smith *et al.*, 2020). These findings were consistent with those of the present study, which indicated that the psychological effects of pickleball were both immediate and sustained.

Table 1. Psychological benefits of playing pickleball for the personnel.

No	Indicators	Mean	SD	Description
1	I frequently feel mentally refreshed after playing pickleball	4.11	0.79	Agree
2	I consistently experience improved mood after playing pickleball.	4.71	0.46	Strongly Agree
3	I notice lasting positive effects on my mindset after each pickleball session.	3.64	0.49	Agree
4	I regularly feel emotionally balanced because of playing pickleball.	4.25	0.80	Strongly Agree
5	I often feel more focused and mentally clear after playing pickleball.	3.71	0.76	Agree
6	I experience longer periods of calmness after playing pickleball.	4.04	0.84	Agree
7	I benefit psychologically from pickleball even hours after I've finished playing.	4.00	0.00	Agree
8	I find that playing pickleball frequently boosts my overall well-being.	4.64	0.49	Strongly Agree
9	I feel mentally stronger the more often I engage in pickleball.	4.43	0.69	Strongly Agree
10	I notice that the psychological benefits of pickleball last throughout my day.	3.39	0.79	Neutral
Total Mean		4.09	0.61	Agree

The data presented in **Table 2** indicated that personnel experienced significant positive mood changes as a result of playing pickleball, with the overall mean score of 4.16 reflecting general agreement on the mood-boosting benefits of the sport. The highest mean scores were observed for indicators related to feeling happier, with a mean score of 4.32, and noticing improvements in overall mood, with a mean score of 4.36, after regular participation in pickleball. These results supported previous research, which suggested that engaging in physical activities, such as sports, could significantly improve mood and emotional well-being (Kuykendall *et al.*, 2015). Moreover, the data revealed that participants felt more energized and positive after playing pickleball, with a mean score of 4.21, further confirming that physical exercise could enhance positive emotional states and combat feelings of fatigue (Rebar *et al.*, 2015). The responses also highlighted that pickleball was used as an emotional coping mechanism, with a mean of 3.79 for using pickleball to lift one's mood when feeling down. This suggested that pickleball not only provided general mood enhancement but also served as an effective strategy for managing negative emotions (Teychenne *et al.*, 2020). Additionally, the statement about feeling mentally refreshed and emotionally lighter, with a mean score of 4.11, reflected the therapeutic benefits of engaging in physical activities to

promote mental clarity and emotional balance, which had been well-documented in the literature (Eime *et al.*, 2013).

These findings implied that integrating pickleball or similar physical activities into one's routine could have been beneficial for personnel in terms of enhancing both their mental and emotional well-being. Organizations or individuals aiming to improve mood and reduce stress might have considered promoting such activities as part of a holistic approach to mental health and workplace wellness (Caldwell, 2019; Chan *et al.*, 2021).

Table 2. Mood of personnel in playing pickleball.

No	Indicators	Mean	SD	Description
1	Feeling happier after playing pickleball.	4.32	0.67	Strongly Agree
2	Noticing an improvement in my overall mood when I play pickleball regularly.	4.36	0.62	Strongly Agree
3	Feeling more energized and positive after a pickleball session.	4.21	0.74	Strongly Agree
4	Using pickleball as a way to lift my mood when I'm feeling down.	3.79	0.42	Agree
5	Feeling mentally refreshed and emotionally lighter after playing pickleball.	4.11	0.32	Agree
Total Mean		4.16	0.55	Agree

The data presented in **Table 3** revealed that personnel had experienced significant reductions in anxiety as a result of playing pickleball, with an overall mean score of 4.16 indicating general agreement with the anxiety-reducing benefits of the sport. The highest mean scores were observed in indicators related to using pickleball as a method to release stress, with a mean score of 4.29, and experiencing calmness and relaxation after playing, with a mean score of 4.21, suggesting that pickleball had been highly effective in reducing physiological and psychological tension. These findings aligned with existing literature, which had emphasized the stress-relieving and anxiety-reducing benefits of physical activity (Barker & Jones, 2017; Bianchi, 2019). Respondents had also reported feeling less anxious after playing pickleball, with a mean score of 4.07, and experiencing fewer anxious thoughts when playing regularly, with a mean score of 3.79. These results were consistent with research showing that regular physical activity could reduce both the intensity and frequency of anxiety symptoms (Herring *et al.*, 2014). Furthermore, the statement about considering pickleball a helpful way to manage anxiety levels, with a mean score of 4.43, underscored its potential as an accessible and enjoyable coping strategy for managing anxiety. This had supported previous studies that highlighted the role of physical activities, including recreational sports, in promoting emotional regulation and reducing the physiological effects of stress (Bowers, 2017).

The implications of these findings suggested that incorporating pickleball into daily or weekly routines could have provided personnel with an effective tool for managing anxiety and stress, contributing to improved mental health and well-being. This insight was particularly relevant for organizational wellness programs, which could have benefited from offering or promoting recreational activities like pickleball as part of an overall strategy to reduce workplace stress and enhance employee mental health (Cooper & Clarke, 2018).

Table 3. Anxiety of personnel in playing pickleball.

No	Indicators	Mean	SD	Description
1	Feeling less anxious after playing pickleball	4.07	0.60	Agree
2	Using pickleball as a way to release stress and tension	4.29	0.54	Strongly Agree
3	Feeling calmer and more relaxed after a pickleball session	4.21	0.63	Strongly Agree
4	Experiencing fewer anxious thoughts when I regularly play pickleball	3.79	0.42	Agree
5	Considering pickleball a helpful way to manage my anxiety levels	4.43	0.50	Strongly Agree
Total Mean		4.16	0.54	Agree

The data presented in **Table 4** indicated that playing pickleball positively impacted personnel's self-esteem, with an overall mean score of 3.96, reflecting general agreement with the self-esteem benefits associated with the sport. The highest mean scores were observed for indicators such as feeling more confident about oneself, with a mean score of 4.07 and believing that self-worth improved with regular engagement in pickleball, with a mean score of 4.07. These findings supported previous research that showed physical activities could significantly enhance self-confidence and self-worth (Lundqvist, 2018). Additionally, the indicator related to feeling more positive about oneself when playing pickleball consistently, with a mean score of 4.11, suggested that regular participation in the sport reinforced a positive self-image and contributed to greater psychological well-being (Fleming *et al.*, 2020). The indicators reflecting a sense of accomplishment, with a mean score of 3.79, and pride in performance or progress, with a mean score of 3.79, showed that personnel perceived pickleball as a source of achievement, which was linked to enhanced self-esteem (Penedo & Dahn, 2005). These responses were in line with studies that highlighted the role of physical activity in providing individuals with tangible goals and experiences of success, which could significantly improve self-esteem (Cresswell & Eklund, 2017). The overall pattern of results suggested that pickleball, as a sport, helped personnel develop and maintain a positive self-view through regular physical engagement, contributing to better mental health and personal satisfaction. These findings implied that incorporating activities like pickleball into daily routines could have helped individuals build confidence, achieve personal goals, and improve their overall self-esteem. Organizations might have considered offering such activities as part of wellness programs to promote not only physical health but also emotional well-being among personnel (Allen *et al.*, 2021).

Table 4. Self-esteem of personnel in playing pickleball.

No	Indicators	Mean	SD	Description
1	Feeling more confident about myself after playing pickleball.	4.07	0.60	Agree
2	Believing my self-worth improves when I engage in pickleball regularly.	4.07	0.47	Agree
3	Feeling a sense of accomplishment after playing pickleball.	3.79	0.42	Agree
4	Feeling proud of my performance or progress in pickleball.	3.79	0.42	Agree
5	Feeling more positive about myself when I play pickleball consistently.	4.11	0.32	Agree
Total Mean		3.96	0.44	Agree

The results presented in Table 5 revealed key insights into the relationships between the psychological benefits, mood, anxiety, and self-esteem of personnel who played pickleball. Notably, the correlations indicated that mood was significantly and positively related to both anxiety reduction ($r = 0.782$, $p < .001$) and self-esteem ($r = 0.717$, $p < .001$). Similarly, anxiety reduction was strongly associated with improved self-esteem ($r = 0.768$, $p < .001$). These significant correlations suggested that as players experienced better moods, they also reported lower anxiety and higher self-esteem. This aligned with findings in recent literature, which emphasized the interconnected nature of emotional regulation, anxiety, and self-perception in response to physical activity (Lubans *et al.*, 2018).

However, the results also showed that psychological benefits were not significantly correlated with mood ($r = -0.164$, $p = 0.406$), anxiety ($r = -0.092$, $p = 0.64$), or self-esteem ($r = -0.054$, $p = 0.786$). This lack of significant correlation may have indicated that while individuals perceived standalone psychological benefits from playing pickleball (such as mental clarity or emotional balance), these benefits might not have directly influenced their mood, anxiety levels, or self-esteem as measured in this context. These findings were somewhat unexpected and warranted further exploration. They may have suggested that different psychological dimensions of physical activity manifested independently or were influenced by additional mediating factors (Rodrigues *et al.*, 2020). The strong intercorrelations between mood, anxiety, and self-esteem highlighted the importance of emotional outcomes in the mental health benefits of recreational activities. This supported the theoretical understanding that mood enhancement could serve as a mediator in reducing anxiety and fostering a positive self-concept through physical activity (Zhang *et al.*, 2022). From a practical standpoint, these results suggested that recreational programs such as pickleball could have been strategically promoted not only for general psychological wellness but specifically for enhancing mood and self-esteem while alleviating anxiety.

Ultimately, while general psychological benefits from pickleball may have operated independently, the strong and significant relationships among mood, anxiety, and self-esteem underscored the role of emotional well-being as a critical pathway through which physical activity enhanced mental health. Future interventions might have focused on maximizing mood-related experiences during such activities to amplify broader psychological outcomes (Adams & Moore, 2017).

Table 5. Significant relationship between psychological benefits, mood, anxiety, and self-esteem of playing pickleball.

Variable	Psychological Benefits	Mood	Anxiety	Self-esteem
Psychological Benefits	Pearson's r	-		
	p-value	-		
Mood	Pearson's r	-0.164	-	
	p-value	0.406	-	
Anxiety	Pearson's r	-0.092	0.782	-
	p-value	0.64	< .001	-
Self-esteem	Pearson's r	-0.054	0.717	0.768
	p-value	0.786	< .001	< .001

4. CONCLUSION

This study demonstrated that playing pickleball provides notable psychological benefits for university personnel, particularly in improving mood, reducing anxiety, and enhancing self-esteem. The findings revealed that regular participation fosters emotional balance, promotes relaxation, and strengthens self-confidence, making pickleball an effective strategy for supporting mental well-being in the workplace. Significant correlations between mood, anxiety reduction, and self-esteem highlighted the central role of emotional well-being as a pathway to improved mental health. Although general psychological benefits were not strongly associated with these variables, the results underscore pickleball's value as a recreational activity that contributes to resilience and positive self-perception. Incorporating pickleball into workplace wellness programs may therefore serve as a practical approach to reducing stress and promoting holistic well-being among employees. Future studies are encouraged to explore its effects across diverse groups and different levels of participation to further establish its relevance in mental health promotion.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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