

# Exploring Wellbeing In Older Adults Participating In Pickleball

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## Abstract

This qualitative study examines how pickleball fosters wellbeing in older adults, using Ryff's Psychological Wellbeing (PWB) model as a framework. Through semi-structured interviews and thematic analysis, the research highlights how pickleball supports autonomy, purpose, and positive social connections. Socialization and physical activity were key contributors to wellbeing, with participants describing a strong sense of belonging within their groups. Notably, intermediate and advanced players prioritized community and connection over competition, challenging prior assumptions. While Ryff's model effectively guided theme development, some experiences such as social identity and communal bonds—extended beyond its scope. The study addresses a gap in predominantly quantitative research by offering rich insights into the subjective mechanisms through which recreational activities like pickleball promote mental, physical, and social health. Findings suggest that pickleball can be a valuable intervention for enhancing wellbeing, personal growth, and inclusion among older adults.

## Keywords:

## Introduction

### **Pickleball, psychological wellbeing, socialization, physical activity, community**

Wellbeing plays a key role in physical and mental health (Mansfield et al., 2020). Physically, it supports energy levels, reduces the risk of illness, and contributes to increased longevity. Mentally, it enhances emotional resilience, cognitive functioning, and overall happiness (Mansfield et al., 2020; Mistry et al., 2019; White et al., 2017). In recent decades, wellbeing has emerged as a growing area of research, with definitions varying according to the specific dimension under study (Mistry et al., 2019). It is widely recognized as a multidimensional concept that encompasses physical, mental, and social health. Encompassed within these dimensions' factors such as self-esteem, self-efficacy, flourishing, self-determination, resilience, quality of life, life satisfaction, and a sense of worthwhileness (Enshaei, 2018; Mansfield et al., 2020; Mistry et al., 2019; Scaria et al., 2020).

Given its complexity, wellbeing is often categorized into hedonic and eudaimonic dimensions to distinguish between aspects of

pleasure and happiness (hedonic), and those of meaning and self-realization (eudaimonic) fulfillment (Enshaei, 2018; Mansfield et al., 2020; Ryff, 1989). The hedonic perspective centres on the pursuit of pleasure, emphasizing positive emotions, immediate gratification, and happiness. In contrast, the eudaimonic perspective focuses on personal growth and flourishing, highlighting the importance of pursuing meaningful goals, achieving personal excellence, and living in accordance with one's values (Enshaei, 2018; Mansfield et al., 2020; Ryff, 1989). Recent research has increasingly examined intervention strategies aimed at enhancing various dimensions of wellbeing. Among these leisure and recreational activities have been identified as effective mechanisms for improving adult wellbeing, supporting both hedonic and eudaimonic outcomes (Eigenschenk et al., 2019; Heo et al., 2018; Mansfield et al., 2020; Mistry et al., 2019).

Leisure is a broad term often defined as free time away from work, characterised by a sense of freedom in how individuals choose to spend that time, intrinsic motivation, and the experience of enjoyment (Chen et al., 2021; Hall & Page, 2014; Iso-Ahola & Baumeister,

2023). The activities an individual engages in during their leisure time are commonly referred to as recreational or leisure activities (Gulam, 2016, Hall & Page, 2014; Mansfield et al., 2020). Recreational activities are structured or causal pursuits undertaken during leisure time and encompass various leisure activities, including active vs. passive, seeking vs. escaping, solitary vs. interpersonal, and serious vs casual experiences (Hall & Page, 2014; Iso-Ahola & Baumeister, 2023; Roy & Orazem, 2021). Although the terms recreational activities and leisure activities are often used interchangeably; recreational activities are more accurately described as an umbrella term encompassing many types of leisure activities (Hall & Page, 2014).

Prior studies focusing on recreational activities have found positive associations with multiple dimensions of wellbeing, including cognitive functioning, sense of purpose, physical functioning, reduced depression, and successful aging (Heo, et al., 2018; White et al., 2017). However, Ryu and Heo (2018) note that the benefits of recreational activities can vary depending on the type of activity, its intensity, and duration. High-intensity recreational activities, such as jogging, swimming, and woodworking are known to enhance physical health, whereas low intensity activities like sewing, reading, and listening to music are more often associated with improved mental health in later life (Everard et al., 2000; Wray et al., 2021). Similarly, recreational activities with a social or productive focus, such as attending church, volunteering and gardening have been linked to greater life satisfaction, happiness, physical functioning, and lower mortality rates (Menec, 2003; Ryu & Heo, 2018). Understanding the specific wellbeing outcomes associate with diverse types of recreational activities can help tailor effective intervention strategies. Whilst many studies have found a correlation between recreational activities and wellbeing, few have identified the specific mechanisms that promote various aspects of wellbeing within these activities (Chen et al., 2021; Heo et al., 2018; Ryu et al., 2022).

### **Pickleball and Wellbeing**

Pickleball is currently the fastest-growing recreational activity in the United States, with interest rapidly expanding to other countries,

including Australia (Chen et al., 2021; Larkin, 2024; Meiklejohn, 2024; Ryu et al., 2018). Previous studies often classify pickleball as a serious leisure activity, as participants frequently demonstrate the six experiential qualities associated with serious leisure: perseverance through difficult situations, career-like progression, significant personal effort, personal and social benefits, a unique ethos, and a strong identification with the pursuit (Heo et al., 2018; Ryu et al., 2018; Stebbins & Sachsman, 2017; Stroesser et al., 2024).

Pickleball is typically described as a hybrid sport that combines elements of tennis, badminton, and table tennis. It is played with the objective of preventing the opponent from returning the ball within the court boundaries (Buzzelli & Draper, 2020). The game was invented in 1965 on Bainbridge Island by Joel Pritchard, Bill Bell, and Barney McCallum. Initially seeking to create a game their families could enjoy together, Pritchard and Bell improvised using a badminton court, ping pong paddles, and a plastic ball. They later adjusted the net height and introduced McCallum to the game. Since then, pickleball has evolved into a distinct sport, featuring custom-designed paddles and balls. It can be played in singles or doubles formats, with doubles being the most popular (Cerezuela et al., 2023).

Pickleball's connection to multiple dimensions of wellbeing combined with its rapid growth, low impact nature, inclusivity, and ease of learning, has made it an important focus of research, particularly when it involves older adults (Cerezuela et al., 2023; Chen et al., 2021; Heo et al., 2018; Stroesser et al., 2024; Wray et al., 2021). Several studies have found that participation in pickleball is associated with enhanced social wellbeing, physical health, successful aging, a sense of meaning, life satisfaction, social integration, conscientiousness, and openness to experience (Cerezuela et al., 2023; Heo et al., 2018; Stroesser et al., 2024).

However, while these associations are well documented, it remains unclear which specific aspects of pickleball contribute to improvements in these areas of wellbeing. Moreover, these outcomes have not yet been

examined through an integrated model that considers the various dimensions of wellbeing within a comprehensive framework.

The introduction has established the importance of wellbeing, the role of leisure activities in promoting it, and the rapidly growing popularity of pickleball, particularly among older adults. While prior research has identified positive associations between pickleball participation and various dimensions of wellbeing, such as physical health, social wellbeing, and life satisfaction, a significant gap remains in understanding the specific mechanisms through which recreational activities like pickleball promote these different factors of wellbeing. Previous studies have often relied on quantitative methods, which can limit the depth of understanding regarding the nuanced, subjective experiences of individual participants. Furthermore, although certain relationships between pickleball and wellbeing have been identified, they have not always been investigated through a comprehensive framework that integrates these dimensions.

To address these crucial gaps, this study specifically aims to understand the role of pickleball in promoting wellbeing within a Western Sydney population. We achieve this by employing qualitative methods, specifically semi-structured interviews and reflexive thematic analysis, and utilizing Ryff's six-factor Psychological Wellbeing (PWB) model as a comprehensive theoretical framework. This approach allows us to collect rich, nuanced data on participants' subjective dimensions of wellbeing, including their emotions, values, beliefs, narratives, perceptions, and experiences. By applying Ryff's PWB model, which aligns with many of the previously established relationships between pickleball and wellbeing, this research can uncover the specific ways participants experience improvements across dimensions such as positive relations with others, personal growth, environmental mastery, purpose in life, self-acceptance, and autonomy. This comprehensive exploration of lived experiences goes beyond mere associations to identify the underlying mechanisms of wellbeing promotion in pickleball.

### **Pickleball, Wellbeing, and Ryff's Six Factor Psychological Wellbeing Model**

Although previous studies have examined subjective wellbeing and personality traits among pickleball participants (Heo et al., 2018; Ryu et al., 2022), Ryff's Six-Factor Psychological Wellbeing (PWB) Model has not yet been applied in this context. This model has been effectively used in research on other recreational activities, including tennis, where its dimensions align with commonly observed outcomes (Carrasco et al., 2013; Alamdarloo et al., 2019; Micoogullari et al., 2017). Given the structural and experiential similarities between tennis and pickleball, it is reasonable to infer that pickleball may also support these wellbeing dimensions. However, the specific mechanisms through which psychological wellbeing is cultivated in pickleball remain unclear (Cerezuela et al., 2023).

Prior research suggests that pickleball supports social wellbeing, aligning with Ryff's dimension of positive relations with others (Heo et al., 2018; Ryff, 1989). This is often linked to the sport's social structure, particularly doubles play, which fosters teamwork and intergenerational interaction (Casper & Jeon, 2019; Heo & Ryu, 2024). However, the ways in which these elements contribute to wellbeing vary. For instance, gender and skill level influence social dynamics, women tend to form stronger interpersonal bonds, while men focus more on competition and equipment (Ryu et al., 2018); casual players value fitness and socialisation, whereas advanced players prioritise mastery (Casper & Jeon, 2019). Despite clear evidence of social engagement, the mechanisms driving positive relationships, such as collaborative learning, shared goals, feelings of inclusion, or homophily remain underexplored (Dalen & Seippel, 2021; McPherson et al., 2001).

Pickleball has been linked to improved physical health, aligning with Ryff's dimension of personal growth (Ryff, 1989), through benefits such as enhanced muscle function, cognitive speed, balance, flexibility, and reduced pain (Chen et al., 2021; Wray et al., 2021). While these studies demonstrate physical gains, they offer limited insight into how participants experience these benefits, or which aspects of the sport contribute most to

wellbeing. Additionally, pickleball supports other dimensions of eudaimonic wellbeing, including purpose in life and environmental mastery (Heo et al., 2022; Ryu et al., 2020). Purpose is fostered through goal setting, achievement, and reduced depression, while environmental mastery is reflected in skill development, strategic play, and improved coordination (Cerezuela et al., 2023; Rodríguez-Bravo et al., 2020).

Studies applying serious leisure theory to pickleball suggest that sustained, meaningful engagement in the sport supports personal growth, social integration, and life satisfaction (Heo et al., 2018). While the theory highlights fulfilment and identity development through committed participation, the specific mechanisms, such as motivations, perseverance, or social reinforcement remain underexplored (Casper & Jeon, 2019; Cerezuela et al., 2023). Emerging research also links pickleball to personality traits like conscientiousness and intrinsic motivation, which align with Ryff's dimensions of autonomy and self-acceptance (Ryu et al., 2022; Ryff, 1989). Participants often exhibit task orientation and openness, suggesting the sport may foster self-awareness and independence (Buzzelli & Draper, 2020). However, much of the existing research relies on quantitative methods, which may overlook the nuanced, subjective experiences of players. Scholars advocate for qualitative approaches to better capture emotional, social, and narrative dimensions of wellbeing, particularly in the context of pickleball's unique social and developmental qualities (Jormfeldt, 2019; Mansfield et al., 2020).

Despite these promising findings, existing studies do not clearly delineate how specific aspects of pickleball such as its rapid learning curve or team-based structure—contribute to these wellbeing outcomes (Buzzelli & Draper, 2020; Cerezuela et al., 2023; Ryu et al., 2022). One possible explanation for this gap is the predominance of quantitative methodologies in the current literature, which may lack the depth and nuance required to capture the subjective experiences of participants (Jormfeldt, 2019; Mansfield et al., 2020; Ryu et al., 2022). To advance this field, future research would benefit from

incorporating qualitative or mixed method approaches to better understand the lived experiences of individuals engaging in pickleball and how these experiences relate to dimensions of psychological wellbeing.

Building on the preceding review, it is evident that recreational activities play a significant role in promoting wellbeing through a range of psychological and social pathways (Chen et al., 2021; Hall & Page, 2014; Iso-Ahola & Baumeister, 2021; Stebbins & Sachsman, 2017). Among these, pickleball has emerged as the fastest-growing recreational activity in Australia (Larkin, 2024; Meiklejohn, 2024). Gaining a deeper understanding of how wellbeing is experienced by pickleball participants not only contributes to the existing literature but also informs the development of targeted intervention strategies for specific populations.

Existing research has linked pickleball to multiple dimensions of wellbeing that align with Ryff's Psychological Wellbeing (PWB) framework (Buzzelli & Draper, 2020; Casper & Jeon, 2019; Heo et al., 2018; Ryu et al., 2022). Applying this framework may help clarify the mechanisms through which pickleball supports psychological wellbeing. However, most studies rely on quantitative methods, which often overlook the nuanced, subjective experiences of participants (Chen et al., 2021; Stroesser et al., 2024). To address this gap, the present study adopts a qualitative approach, focusing on players in Western Sydney to explore how pickleball contributes to psychological wellbeing from the participants' perspectives.

## Methodology

Ethical approval was obtained from the University Human Research Ethics Committee. To ensure confidentiality, pseudonyms were used, and all identifiable data were securely stored on password-protected systems in accordance with university guidelines. Participants were informed of their right to withdraw at any time without penalty and were reminded of this at the beginning of each interview. In the event of discomfort or emotional distress, participants were provided with contact details for local mental health

support services, including Lifeline and Beyond Blue.

Participants were recruited through purposive sampling by contacting local pickleball session organizers in Western Sydney, who distributed flyers to players. This method targeted active community pickleball participants. Interested individuals then contacted the research team directly. The sample size was based on data saturation, with no new themes emerging after 15 interviews, consistent with prior studies recommending 12 participants for reflexive thematic analysis in small homogeneous samples (Guest et al., 2006). Inclusion criteria required participants to be adult pickleball players aged 18 or older and fluent in English, ensuring clear engagement with interview questions. Most participants were older adults and retirees, reflecting the sport's popularity within this demographic.

Semi-structured interviews were conducted with 15 participants using an open-ended guide to explore their experiences with pickleball, including motivations, physical activity, leisure, changes since starting, and embodied experiences. This format encouraged open and reflective responses. Interviews were audio-recorded and transcribed verbatim using NVivo 14. A constructivist approach was adopted, acknowledging that wellbeing is subjective and shaped through shared understanding between the interviewee, interviewer, and analyst (Madill et al., 2000). Personal reflexivity was maintained throughout, with consideration given to how my values, experiences, interests, and social identity might influence the interpretation of data (Braun & Clarke, 2019).

### Data Analysis

Transcripts were analysed using Braun and Clarke's (2006) six-phase reflexive thematic analysis, combining inductive and deductive approaches. This allowed for data-driven insights while applying Ryff's Psychological Wellbeing (PWB) framework, as used in previous studies. Initial familiarisation involved reading transcripts, assigning pseudonyms, and importing data into NVivo 14. Semantic codes were generated inductively from participants' explicit statements (e.g., "developing skills," "enjoying socialisation"), followed by latent codes that captured deeper

meanings (e.g., "community belonging," "sense of welcomeness"). These codes were then deductively organised into themes aligned with Ryff's six PWB dimensions. For example, a participant's description of deep conversations during breaks was coded as 'community belonging' and linked to 'Positive relations with others.' This iterative process ensured themes were grounded in lived experience while guided by theory. During theme review, I assessed alignment with Ryff's framework and noted where participant experiences extended beyond its definitions. Themes were refined to reflect both theoretical constructs and participant narratives, culminating in a report that illustrates how pickleball promotes various aspects of psychological wellbeing.

### Results

The key themes were based on Ryff's six dimensions of PWB: positive relations with others, personal growth, environmental mastery, purpose in life, self-acceptance, and autonomy. Using high scorer attributes for these dimensions (Ryff, 1989), pickleball participants' experiences were analysed.

#### Positive Relations with Others

Ryff (1989) describes high scorers in this dimension as maintaining warm, satisfying, and trusting relationships, showing concern for others, empathy, affection, and understanding the give and take of interactions. Most participants' experiences aligned with these attributes, though affection and intimacy were not commonly described, and competitive players sometimes disrupted warm relationships.

Social connection was a primary reason for engaging in pickleball, with many forming warm, satisfying relationships. Initial participation was often driven by the desire to meet new people, while continued involvement was motivated by social connections. Retirees frequently mentioned pickleball to interact regularly, with conversations occurring between games due to limited courts and participant fatigue. Many valued the social aspect more than the game itself, as one participant noted:

"Most of the people here adore pickleball, but you'll still see conversations go on when there's an empty court. And that's not because they don't want to play pickleball. It's because they're in an in-depth conversation with someone about a particular topic or personal topic" (Jamie).

Participants demonstrated concern for others and empathy, describing the game as welcoming, inclusive, and supportive. Experienced players often helped inexperienced players, creating a positive atmosphere. New players felt welcomed and coached, as one noted:

"I'm still very much learning, but I certainly find the other players very welcoming to beginners, and I can see just with continuing to go, that I'm improving" (Bailey).

A sense of community and belonging, not directly covered in Ryff's definition, was frequently mentioned. Participants highlighted community as elevating their mood and providing social satisfaction and a sense of membership. One participant expressed:

"When I continued going to be a social member of the pickleball group, I discovered that it was a really lovely way of meeting people, and I'm making new friends" (Rose).

However, casual participants noted tension with competitive players, describing them as too rough or overly competitive. One participant remarked:

"They'll hog the whole court, or you know they'll run into you just to get the ball, and you know, and so it's, they shouldn't really be there. One fellow there is way too competitive, and way too good for all of us, so he should be looking for something a bit more challenging" (Ellen).

Trust was mentioned predominantly through gameplay, especially in doubles where partners had to coordinate effectively. One participant noted:

"I'm paying attention to my partner, how he or she is playing. Because every time you play- you're playing socially, so we're just

swapping partners all the time, randomly if you like" (Nathan).

Participants who played with their spouses often spoke about improved communication and joint goals, enhancing their relationship. One participant shared:

"Even in that sense it's probably, you know, made our relationship that little bit stronger. I mean sometimes it's a little bit annoying playing with him or against him, but it's helped our relationship as well. We go together, we chat about it. Yeah" (Joyce).

Overall, participants' experiences aligned with many of Ryff's attributes of positive relations with others. The welcoming nature facilitated new participants joining easily, and the sense of community provided a feeling of belonging. Intimacy and affection were enhanced between spouses, though there was tension between casual and competitive players.

### **Personal growth**

According to Ryff (1989), high scorers in personal growth are characterised by a sense of continued development, seeing oneself as growing and expanding, openness to new experiences, realisation of potential over time, seeing improvement in self and behaviour, and changing in ways that reflect self-knowledge and effectiveness. Many pickleball participants reported experiences that aligned with Ryff's attributes, particularly in areas related to health, skill development, and mental wellbeing.

Participants frequently described a sense of continued development, both physically and mentally. Often players would describe the ease of play because of the minimal impact nature of the game. Particularly, elderly participants would describe being able to continuously improve in physical and mental areas that they couldn't in other recreational activities. Furthermore, the ease of learning pickleball combined with the challenge of mastering it was mentioned by several players as a driving factor for their sustained participation. One participant noted: "So it's easy to get into the intermediate level but to get there to advance is hard work, because it

becomes very challenging and difficult.” (Kiara)

Additionally, players would often describe multiple areas they were improving in. Many beginner and intermediate players describe improvement in areas like balance, reflexes, mobility, and physical fitness whereas more advanced players would often describe working on difficult gameplay techniques, coordination with their partner, and strategy, reflecting growth and expansion. One beginner participant stated: “My reaction is a little bit quicker, you know, with pickleball you really need to have, you know those reflexes. So, I guess I’m picking up the reflexes a little bit quicker now” (Ellen). Participants also expressed a keen sense of realising their potential and striving for growth through improvements in these areas. When asked about changes since starting pickleball, one intermediate participant highlighted: “I’ve become more ambitious” (Owen)

Similarly, many participants mentioned changing in ways that reflect more self-knowledge and effectiveness through continued development of skills and improved physical attributes like reflexes. One participant mentions the constant adaption to other participant’s playing styles, indicating continued improvement in self-knowledge and effectiveness: “And so I enjoy the challenge against the various players. Because everyone’s got a different – your opposing players all got a unique style. So, you need to adapt” (Henry)

Participants expressed positive experiences of personal growth, in a range of different areas, including physical and mental. When asked to describe changes since starting pickleball many participants describe mood enhancement through physical activity and socialisation. Participants emphasised continuous improvement and progress, through physical improvement, skill development, constant adaption to different playing styles, and increased ambition. Retirees often mentioned it was an effective way to improve their health through recreation because of the minimal impact nature. Overall, the experiences of pickleball participants aligned strongly with Ryff’s personal growth attribute,

particularly in areas of physical, mental, and skill-based growth.

### **Environmental mastery**

Environmental mastery, as described by Ryff (1989), involves having a sense of competence and control over the environment, controlling an array of external activities, making effective use of surrounding opportunities, and choosing or creating contexts suitable to personal needs and values. In the context of pickleball, most participants exhibited strengths in environmental mastery in non-gameplay settings, however, experienced pickleball players exhibited competence in managing the environment in gameplay settings. This was reflected in their ability to strategically adapt to their opponents and weather conditions. One participant explained how they have to be competent in playing with or against the wind in an outdoor setting.

Windy weather is a challenge because it’s an outside court area where we play. And when the wind comes up you have to be very mindful that it might carry the ball if you’re downwind or upwind of it, and you’re playing against it or with the wind (Carla)

However, adapting to wind was sometimes empathised as a frustration for other participants. As one participant notes when they first started playing. “So, the windy conditions is a bit of a problem. So that’s challenging, trying to play in the wind. And actually, it’s a bit too annoying for me. I don’t like it when it’s windy” (Jean)

Similarly, experienced players often describe controlling a complex array of external activities. Being constantly aware and adjusting themselves because of their surroundings. One participant describes coordinating with partners, focusing on the ball, studying and outmanoeuvring opponents, and showing control over the complex array of activities during the game.

We pay attention to the ball and your opponents, so... back [sic] doubles most of the time. So, you obviously have to coordinate your reactions through your partner. And you focus on

your opponents. See what they're doing and try to outdo them (Owen)

different sort of skills or abilities (Rose)

Some participants also describe making effective use of surrounding opportunities, such as finding and taking advantage of gaps, where the ball could go, and learning from participants who are better than them. This aspect was not only described by skilled players. One intermediate participant describes their mindset when playing with someone better than them and how they adapt to change it to make better use of an opportunity.

I notice right away, hmm... I'm the weakest player on the court, I try to sort of shake myself out of that negative thought pattern and think about okay, here's an opportunity to play with a better player. Can I get a shot by him? Can I cause them to make an error to where I'm not? (Amelia)

Participants also describe many assorted styles of playing. Often stating, that being stronger, fitter, or quicker, doesn't necessarily give one an advantage, like it might in other recreational activities. Participants often stated that players weak in some areas, such as less mobility can play competitively by using other skills. One participant notes the difficulty of playing against a less mobile opponent in a wheelchair "Now, lots of people can do lots of things, even in wheelchairs. But this guy, he's played competition, and it was really something. He was really, really good." (Jamie).

Participants often describe this adaptability of various skills contributing to the welcomeness of the group and how there is no one skill that makes a player better than another. Some participants described ways to make use of their personal attributes, such as strategy, balance, or reflexes, to create contexts suitable to them on the court. As described by Rose, who uses her height to her advantage.

So being tall, is helpful. If there's a ball up here, and I can reach up to hit it whereas you know my partner might be short and can't get to the ball, so I suppose, everyone has their own

Outside of gameplay contexts, many participants describe environmental mastery by choosing or creating contexts suitable to personal values. Many participants choose to play pickleball, as it aligned with their values of getting healthier, having structure, and developing skills. This was not specific to experienced players as many non-experienced players also described starting pickleball for one or multiple of these reasons. As stated by one participant: "I think, to summarize, we're all headed towards the same goal. We all have the same values in as much as we like to play a good game" (Carla)

While experienced players demonstrated obvious signs of environmental mastery, beginners or those less familiar with the game sometimes struggled to manage external factors or lacked the sense of control as described by Ryff in gameplay settings. Participants often mentioned the variety of ways to succeed in pickleball, and how being faster or stronger doesn't necessarily give an individual an advantage. Overall, advanced pickleball players reflected attributes of environmental mastery in gameplay, whereas newer players mostly provided descriptions of environmental mastery mentally and off court settings.

### **Purpose in life**

Ryff (1989) describes purpose in life as possessing clear goals, a sense of direction, finding meaning in their present and past life, and having aims and objectives for living. Pickleball participants, especially elderly participants and advanced players described aspects of purpose that aligned with Ryff's high scorers, with many framing pickleball as a source of structure, goals, and fulfillment.

Several participants, particularly retirees, emphasised the role of pickleball in providing a sense of directedness through structure and socialisation. Other participants, emphasised improvement, which can be seen as goals and objectives for living. As stated by one participant wishing to continuously improve: "I'm in the intermediate level, going to advanced. And for that, I need a lot of a



strategy, and lots of work to get to that level.” (Carla)

Some participants describe beliefs of purpose through continuous development, social interaction, and structure. An advanced player who is a coach describes purpose in life by helping others improve and watching pickleball as a game grow. “It feels good to mentor other people and improve their skills, it’s an extremely rewarding experience. The game itself is quite enjoyable and you know, it’s rewarding to see it grow as it is” (Justin). Many retired participants describe the structure of having pickleball as an activity as a beneficial aspect of their life, as described by one participant: “I just sort of think it is good to do some things when you’re retired, you know, have a bit of structure to your week” (Maya)

While many participants demonstrated high scorer attributes related to having goals and purpose, no one explicitly mentioned the reflection of meaning to present and past life that Ryff associates with this component. Furthermore, many participants described characteristics of purpose in life outside of pickleball, such as planning holidays, having close connections with family, and other hobbies.

### **Self-acceptance**

According to Ryff (1989), high scorers in self-acceptance possess a positive attitude toward the self, acknowledge both good and bad qualities, and feel satisfied with past life experiences. In comparing this framework to the pickleball participants, most reported experiences reflected these attributes through pickleball’s many ways of playing and developing skills, though reflections on past life were minimal.

Many participants expressed a positive attitude toward themselves. Many participants focused on their enjoyment of the game and improvement rather than on winning, often acknowledging that winning was a bonus. For example, one participant described their approach to pickleball: “As I said, no one gets upset if there’s a contentious call. Money is not at risk, it’s just the sheer enjoyment, that joy that comes from it. As I said, in you being physical” (Henry).

To make improvements, participants frequently acknowledged both strengths and weaknesses. Several described adapting their play style based on their personal abilities or health conditions. One participant describes overcoming aches and pains when first starting. “You work through all the aches and pains because you’re using different muscles and muscles you haven’t used for a while. But there’s no doubt that my mobility and flexibility are better for playing pickleball” (Madeline). Many participants described pickleball as providing a sense of purpose, either through continuous improvement, socialisation, or structure. Participants frequently acknowledged personal qualities, to make improvements, and characteristics, such as dissatisfaction or regret, were rarely expressed.

### **Autonomy**

Ryff (1989) describes high scorers in autonomy as self-determined and independent, resisting social pressures, regulating their behaviour based on personal standards, and evaluating themselves based on personal standards. When comparing pickleball participants’ experiences to this framework, most expressed autonomy through self-driven motivation and personal improvement, though there were few references to resisting social pressures.

Many early adopters of pickleball demonstrated a keen sense of autonomy before participating in pickleball. Early adopters often described how they had to take the initiative to join or start a pickleball community as Pickleball was not big in Australia, and the COVID lockdowns made it difficult to join or start any activities. Participants, who had played pickleball before, demonstrated a powerful sense of self-determination when it came to initiating and maintaining their participation in pickleball. For instance, one participant described their determination to find or start a pickleball group despite challenges:

I left messages and nobody got back to me. So, when my mother passed away and I was still interested in Pickleball. well, I bought a Pickleball set, paddles and balls, and brought them back to Sydney with me because I thought, I’m going to start Pickleball here. But I

came back and found that contact (Madeline)

Participants often regulated their behaviour by personal standards, focusing on self-improvement rather than external expectations. Many participants stated that winning was a secondary goal to socialisation, physical activity, and self-improvement, and that it wasn't an activity that should be taken seriously. One participant explained: "No, the only challenges for myself, I suppose just continuous improvement, and not get angry at myself. Don't take it too seriously" (Owen). This self-determination and internal motivation were evident in many participants. Overall, participants displayed autonomy in terms of pursuing personal goals and improvements.

### Discussion

This study aimed to investigate the mechanisms through which pickleball promotes wellbeing using a Western Sydney population, and Ryff's PWB model as a framework. Four main findings have been identified: Participants display a predisposition towards certain dimensions of Ryff's PWB model, socialisation and physical activity as primary contributors to positive wellbeing through welcomeness and belonging, tension between casual and competitive players, and the usefulness of Ryff's model in identifying how wellbeing is promoted in pickleball. These findings can be used to provide practical intervention strategies and inform future research.

### Predisposition Towards Certain Dimensions of Ryff's PWB Model

Many participants appeared to display a predisposition toward certain factors in Ryff's PWB model, such as positive relations with others, autonomy, and purpose in life, before participating in pickleball. Many participants, particularly early adopters of pickleball, displayed conscientious characteristics by being active in creating social networks, seeking out or establishing pickleball communities, and engaging in other meaningful hobbies. Heo et al. (2022) state that either conscientious adults play pickleball or pickleball participants are more likely to possess conscientious dispositions. These behaviours suggest a link between conscientious pickleball participants in

Western Sydney and homophily (Dalen & Seippel, 2021; McPherson et al., 2001). However, these characteristics may have been further enhanced by pickleball's other characteristics, such as welcomeness, inclusion, and community.

### Socialisation and Physical Activity as Primary Contributors to Wellbeing Through Welcomeness and Belonging

Socialisation and physical activity were often mentioned as the primary contributors to wellbeing among pickleball participants. Participants frequently noted that the game is accessible to everyone, regardless of age, nationality, gender, or ability. This study supports prior research that describes the inclusivity of pickleball due to players' outgoing attitudes, their regular embrace of newcomers, the activity's minimal impact nature, its gradual learning curve, and its adaptability to assorted styles of play (Heo et al., 2018; Ryu et al., 2022; Stroesser et al., 2024).

Participants consistently stated that positive relationships were built around a sense of shared enjoyment and community, echoing findings from studies investigating other activities like tennis (Dalen & Seippel, 2021; Legg et al., 2017). Specifically, participants described an initial sense of welcomeness from the pickleball group and coaches, who displayed friendly and helpful demeanours. Following this, participants also developed a sense of belonging through trusting friendships and shared goals. Prior studies in leisure and sports have outlined the importance of welcomeness, inclusion, and community in encouraging collaboration and social interaction, and these factors have been linked to providing emotional support and enhancing emotional resilience, which supports the idea of pickleball as a useful intervention for elderly and depressed participants (Darcy et al., 2019; Sakalidis et al., 2023). Collaborative learning and shared goals were notably important, particularly among married couples, where participation in pickleball enhanced their relationships through shared interests, opportunities for healthy communication, and quality time together (Philippe et al., 2023). This finding aligns with literature demonstrating a positive relationship between

couples' satisfaction with regular recreational activities and their overall marital satisfaction (Heo et al., 2018).

Collaborative learning and shared goals were partially important among married couples. This study found that positive relations between married couples improved when playing pickleball together by providing shared interests, opportunities for healthy communication, and spending quality time together. This matches previous literature that shows a positive relationship between how satisfied couples are with the regular recreational activities they do together and their overall marital satisfaction (Johnson et al., 2006). Specifically, it matches prior studies that state marital satisfaction develops through improved communication and shared goals (Liu et al., 2022; Sharaievska et al., 2013). This study adds to the literature by identifying pickleball as a potential strategy for enhancing marital satisfaction.

Socialisation and community were often mentioned by participants that focused on physical activity and mastery as well. Prior studies in pickleball show that socialisation is more important for casual players than for advanced players who often focus more on competition and skill mastery (Casper & Jeon, 2019; Ryu et al., 2018). This study's findings contradict prior studies as intermediate and advanced participants often highlighted the importance of socialisation and community, sometimes more than skill mastery. Descriptions often empathised the positive aspects of frequent social interactions and learning collaboratively. Prior studies have highlighted collaborative learning and interaction as important for enhancing social networks, trust, and goodwill among participants in recreational activities (Dalen & Seippel, 2021; Storr & Richards, 2024).

Notably, this study's findings reveal a significant contrast with prior research regarding the importance of socialisation across skill levels (Casper and Jeon (2019). Previous studies in pickleball often suggest that socialisation is more important for casual players, while advanced players tend to focus more on competition and skill mastery (Casper & Jeon, 2019; Ryu et al., 2018). However, our

findings indicate the opposite: intermediate and advanced participants frequently highlighted the importance of socialisation and community, sometimes even more than skill mastery. This suggests that, for the Western Sydney population studied, the positive aspects of frequent social interactions and collaborative learning within the pickleball community are paramount for all participants, regardless of their skill level or competitive drive. This deeper emphasis on social connection may stem from the inherent structure of the game, fostering strong social networks, trust, and goodwill among players through continuous interaction and mutual support. Participants often stated no one skill is necessarily superior to another, allowing players might lack in certain areas, such as speed or agility due to age, to remain competitive by using other skills or personal attributes. This adaptability contributes significantly to the inclusivity of pickleball (Heo et al., 2018; Ryu et al., 2022; Stroesser et al., 2024).

### **Tension between Casual and Competitive Players**

Despite the overwhelming descriptions of socialisation and community, some participants noted a perceived tension between participants with increased skill levels who were competitive and those who took the game less seriously. This tension was often described by casual players who expressed frustration with competitive individuals. However, a striking and contrasting finding was that many advanced and intermediate participants themselves stated they did not take the game seriously. This observation directly challenges the prevalent serious leisure perspective often applied to pickleball in prior studies (Heo et al., 2018; Stroesser et al., 2024), as the descriptions from participants in this study did not consistently align with the six qualities of serious leisure, such as a strong sense of career development or significant personal effort solely for mastery.

This contrast suggests that engagement with recreational activities like pickleball exists on a spectrum rather than a rigid dichotomy between "casual" and "serious" players. While some competitive behaviors might be perceived negatively by others, this study's findings indicate that even highly skilled players may

not self-identify as "serious" in the traditional sense, often valuing other aspects like social connection more. This supports studies that describe recreational activities existing on a continuum, with participants engaging with varying degrees of commitment and emphasizing diverse aspects, including socialisation and self-actualization, beyond pure competition or skill mastery (Shen & Yarnal, 2010). The tension observed, therefore, may stem from differing perceptions of play styles rather than a fundamental difference in how seriously players of various skill levels truly engage with the activity.

### **The usefulness of Ryff's PWB model in identifying how Wellbeing is promoted in Pickleball**

Overall, Ryff's PWB model proved to be a useful framework for understanding how pickleball promotes wellbeing. Many dimensions of the model were evident in participants' experiences, however, some areas in the model were either not identified or extended beyond these experiences. The definitions for positive relations with others did not encompass areas such as community, belonging, and social identity which were evident in participant descriptions. However, some of these definitions revealed unexpected insights, such as positive relations with others focus on trust and intimacy which helped identify positive martial experiences through pickleball. The give-and-take of human interactions which is an area of positive relations with others, was either less emphasised or not directly discussed by participants. Similarly, while participants demonstrated high levels of autonomy and purpose, there were fewer references to reflections on the past and present, which Ryff associates with purpose in life (Ryff, 1989). Additionally, participants did not explicitly mention challenges related to resisting social pressures, nor did they describe reliance on others for decision-making, which Ryff characterises as low-scorer attributes for autonomy.

### **Strengths and Limitations**

These findings are subject to several strengths and limitations. First, the analysis was structured using Ryff's PWB model which lacks the established reliability and validity of

other frameworks when used qualitatively, as only two studies using similar methods were found (Govindasamy et al., 2020; Hall & Noonan 2023). However, the application of an established wellbeing framework helped provide a structured approach to analyse different wellbeing factors which can be also seen as a strength. This study also relied on interview questions, which were not specifically designed to explore phenomena related to Ryff's PWB model. As a result, certain aspects of wellbeing relevant to the model may have been overlooked. For example, questions asking about reflections of past life may have invoked more nuanced answers. Participants were also classified into the categories of beginner, intermediate, and advanced based on subjective criteria. However, a formal grading system has recently been established in Australia which may have provided a more accurate classification of participants' skill levels (Pickleball Association of NSW, 2024). For strengths, the study used qualitative methods, which helped capture and analyse rich nuanced data of the participants. Practitioners and health promoters could integrate low-barrier recreation activities like pickleball into social prescribing initiatives, emphasising inclusivity, group belonging, and low competition to support older adults' physical, psychological, and social wellbeing.

### **Recommendations for Future Research**

By investigating how wellbeing is promoted in pickleball participants, this study has identified several areas for future research. Since the initial interviews, the population of participants in Western Sydney has grown allowing for more sufficient sample sizes for quantitative methods. Future research could use a mixed methods approach, by utilising Ryff's PWB scales and conducting interviews to better gauge participant experiences. Specifically investigating areas such as the relationship between earlier adopters of pickleball and having a high sense of autonomy, or whether the skills developed in pickleball, such as discipline, strategy, and coordination, translate into other areas of life. Findings also suggest participants experienced a sense of community, social identity, and social capital that may be better captured using other wellbeing frameworks that focus on these areas such as the Social Identity Model of Identity Change (Haslam et al., 2019). Another area of

investigation is pickleball's potential as an intervention for enhancing marital satisfaction. Alternatively, an area for future research is the tension between those who engage in pickleball as a serious leisure and those who see it as a casual recreational activity. Future studies could investigate how these differing levels of commitment influence social relations, group cohesion, and conflict within the pickleball community. Comparative research with other recreational activities could also reveal how common this dynamic is in group activities and how it impacts participant retention and satisfaction.

### Conclusion

This study provides important insights into how various dimensions of wellbeing are promoted and experienced in pickleball participants. Utilising Ryff's six PWB factors and qualitative methods revealed how welcomeness, personal growth, belonging, and shared goals are promoted in pickleball participants. Pickleball can serve as a useful intervention for participants weak in these areas and may serve as a useful intervention to promote marital satisfaction. Overall, this study supported prior studies that identify pickleball as a way to promote wellbeing through, social, physical, and mental health (Cerezuela et al., 2023; Chen et al., 2021; Heo et al., 2018). This study also importantly adds to the growing body of research by identifying how participants experience wellbeing promotion in these areas.

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