The Influence of Demographic Factors on Risk Perceptions and Susceptibility to Problem Gambling in Sports Betting

By

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A dissertation submitted in partial fulfilment of the requirements of the Master of Science in Insurance and Risk Management at the Faculty of Economics, Management and Accountancy at the University of Malta

September 2024

Abstract

TITLE: The Influence of Demographic Factors on Risk Perceptions and Susceptibility to Problem Gambling in Sports Betting

PURPOSE: This dissertation aims to analyse risk perception in the rapidly expanding sports betting industry. The study investigates how demographic factors—such as age, gender, education level, employment status, and income—influence perceptions of risk and susceptibility to problem gambling in sports betting, excluding virtual sports. Additionally, the research explores the interactions between these demographic factors and how they shape individuals' vulnerability to problem gambling, providing a deeper understanding of how these variables jointly impact risk perception within the sports betting context.

DESIGN: This study employed a quantitative methodology to address the stated research objectives. A survey was used to gather data and draw generalized conclusions from the population in Malta. The survey targeted both individuals who engage in sports betting and those who do not, with a total of 285 participants contributing to the research.

FINDINGS: The study has deduced that demographic factors influence individuals' perceptions of risk in sports betting, but not in uniform or predictable ways. Age was found to be a significant factor, with older individuals perceiving sports betting as riskier ($B = 0.190$, $p < .001$), suggesting increased risk aversion with age. However, other demographic variables: gender, level of education, employment status, and income did not show significant effects on risk perception. Furthermore, the research found that these demographic factors did not predict the frequency of sports betting and a near-zero correlation between perceived risk and betting frequency (Spearman's $\rho = -0.007$, $p = 0.900$) was identified, indicating that perceptions of risk do not influence betting behaviour. This highlights that risk perception is largely independent of actual betting practices.

CONCLUSIONS: The study concluded that while demographic factors, particularly age, influence individuals' perceptions of risk in sports betting, these perceptions do not correlate with betting frequency. The study reveals that demographic factors alone do not account for the variability in betting behaviour, indicating that other factors—such as psychological drivers, social influences, or emotional triggers—may play a significant role. Therefore, future research and interventions should incorporate a broader range of influences, including cognitive, emotional, and social factors, to more effectively address problem gambling in sports betting.

VALUE: The findings emerging from this study highlight the importance of addressing a broader range of factors influencing sports betting behaviour, beyond just the demographic variables. The implications suggest a need for more comprehensive policies and interventions that consider psychological and social factors. This research fills a gap by showing that while certain demographic factors, like age, influence risk perception, they do not directly affect betting frequency. This suggests that other factors play a more significant role. The study calls for future research to explore these additional factors and informs more effective public awareness campaigns and support services for problem gambling.

KEYWORDS: Risk Perception, Susceptibility to Problem Gambling, Sports Betting, Demographics

Dedication

I dedicate this dissertation to my Aunt Antoinette,

as a token of my support and admiration for her enduring positive thinking,

even in the face of life's challenges.

Acknowledgments

I wish to express my sincere gratitude to all those who contributed to the successful completion of this thesis.

First and foremost, I am profoundly grateful to my supervisor, Dr. Christian Bonnici West, Ph.D. (Lond.), M.Sc. (Lond.), B.Sc. (Hons.) (Lond.), for his invaluable guidance, insightful feedback, and constant support throughout this research journey. His encouragement and academic expertise have been essential to the development of this work.

I would also like to extend my heartfelt thanks to all the individuals who participated in the survey. Their time, insights, and contributions were crucial to the success of this research, and I deeply appreciate their willingness to share their experiences.

I extend my deepest gratitude to my parents, whose endless support, patience, and constant encouragement have been a pillar of strength throughout my academic journey. Their unwavering faith in me has played a vital role in helping me reach this significant milestone.

Lastly, I dedicate this thesis to everyone who stood by me, offering their guidance, support, and encouragement throughout this challenging yet rewarding process.

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Chapter 1

Introduction

Chapter 1: Introduction

1.1 Introduction

This introductory chapter serves to lay the groundwork for the research study. Section 1.2 provides background information, including basic definitions and explanations. Section 1.3 outlines the necessity of this dissertation. Section 1.4 delineates the research objectives and research question. Section 1.5 acknowledges the scope and limitations of the study. Finally, sections 1.6 and 1.7, present an overview of the dissertation structure, and conclude the chapter, respectively.

1.2 Background Information

This section presents background information on the topic. Section 1.2.1 defines the following key terms: ‘Player’, ‘Bookmaker’, ‘Odds’, ‘Wager’, and ‘Margin’. Sections 1.2.2 to 1.2.4 provide preliminary information on core topics such as the significance of sports betting, susceptibility to problem gambling, and risk perception.

1.2.1 Definitions of Key Terms

This section defines key terms used within this thesis to ensure clarity and precision. These definitions are critical for understanding the research findings and discussions presented.

Definition (Player): An individual who participates in sports betting by placing bets on the outcomes of sports events.

Definition (Bookmaker): A person or organisation that accepts and pays out bets on sports events. Also referred to as a ‘bookie’.

Definition (Odds): The ratio representing the probability of a particular outcome occurring, used to determine the potential pay-out for a bet.

Definition (Wager): A bet or stake placed on the outcome of a sports event.

Definition (Margin): The difference between the true probability of an outcome and the probability implied by the odds offered, representing the bookmaker's profit.

Definition (Sports Betting): The act of placing wagers on the outcomes of sporting events, based on the accuracy of the bettor's predictions.

Definition (Gambling): The act of wagering money or valuables on an event with an uncertain outcome, with the primary intent of winning additional money or material goods.

Definition (Online Gambling): The act of placing bets or wagering on games or events via the internet, often involving virtual platforms that offer various types of gambling activities.

Definition (Problem Gambling): A compulsive behaviour where individuals struggle to control their gambling, leading to negative consequences for their personal, financial, and social well-being.

Definition (Risk Perception): The subjective assessment of the likelihood and consequences of a potential negative outcome, shaped by individual experiences, beliefs, and contextual factors.

1.2.2 Sports Betting: Historical Progression and Industry Dynamics

Sports betting has a long history that has changed throughout time to suit shifts in economics, technology, and society standards. It has evolved from a low-tech, recreational gambling activity to a sophisticated, multi-billion-dollar industry amid the advancement of civilization.

The introduction of the internet at the end of the 20th century brought about a significant transformation in the gambling industry. An extraordinary expansion of the industry was made possible by the

process being accessible to a global audience through online betting platforms (Kasimov, 2023). Because of the internationalisation and digitization of the market, companies can now offer betting on any sport, anywhere in the world. As the betting sector has developed, the need for regulation has grown, to guarantee player safety, transparency, and fairness (Ira, 2023). To regulate this field of activity, several nations have established legal frameworks.

Sports betting is still a major component of the global economy, bringing enormous growth and potential, regulatory, and innovative hurdles. To adapt to new social and technological advancements, the sector will continue to evolve and remain an essential and dynamic component of the global economy (Lopez-Gonzalez & Griffiths, 2016).

From a psychological perspective, there are several intricate mental processes involved in sports betting that influence the player's decisions. Every element shapes the player's attitude towards gambling and competitive sports, adding to the entire framework of our betting behaviour (Seal et al., 2022).

Sports betting companies which can also be recognized as sportsbooks are firms that handle and oversee wagering on a variety of athletic events. Customers wager on these companies' odds, which they establish for various event outcomes. Bookmakers use traders or odds compilers who assess a variety of aspects pertaining to a sporting event, such as player or team statistics, past results, injuries, weather, and other pertinent data (OddsTrader, 2023). Bookmakers set the initial odds for every possible outcome of an event based on a variety of data, including player statistics, team performance, and other relevant factors. To ensure profitability, they also incorporate a margin into the odds, which guarantees a profit regardless of the event's outcome. As betting activity progresses, bookmakers may adjust the odds, particularly if a large number of bets are placed on a specific result. By doing so, they manage their risk and maintain a balanced book (Young, 2023).

1.2.3 Susceptibility to Problem Gambling

Despite its widespread appeal, gambling poses a public health risk because of the social and medical consequences that may affect not just the gambler but also their loved ones and the larger community (Thomas & Thomas, 2015). Technology advancements, particularly the development of the internet, have greatly expanded the availability of gambling (Potenza et al., 2011). The prevalence of gambling has unavoidably increased because of new technology and easy access to the internet (Gainsbury & Blaszczynski, 2017).

Due to its distinct accessibility, online gambling is not the same as offline gambling. The popularity of online gambling is impacted by a variety of factors, including accessibility and availability, which makes this type of gambling accessible and available around-the-clock (Yu et al., 2013). Furthermore, compared to offline gambling, internet gambling has distinct characteristics and tendencies that could contribute to the emergence of gambling disorders (Blaszczynski & Nower, 2002).

Although most gamblers find gambling to be harmless and pleasurable, there are certain gamblers for whom gambling can have extremely negative effects (Wood & Griffiths, 2014). These gamblers may find it difficult to control their gambling addiction and their excessive financial involvement (Petry et al., 2005). The repercussions relating to such situations may include, among others, criminal activity, family relationship dissolutions, and bankruptcy (Shaffer & Martin, 2011). In addition to the potential weaknesses of the gamblers, there are other risks associated with online gambling. These include structural and situational elements like accessibility and anonymity that raise the possibility of someone acquiring a gambling problem (McCormack & Griffiths, 2013).

1.2.4 Risk Perception

When it comes to sports betting, risk perception is a cornerstone of the psychological environment. It depends on a complex study of betting odds, in which gamblers have to pick their way through a maze of possible results (OddsTrader, 2023). Developing one's ability to estimate risk helps gamblers maximise their chances and minimise losses. Competence improves a person's capacity for decision-making, allowing them to make intelligent choices that are more likely to result in success.

To enable players to make thoughtful and calculated wagers, it is imperative to comprehend the delicate equilibrium that exists between perceived risk and the alluring promise of rewards. In sports betting, assessing risk is more than just a skill, it's an art that transforms uncertainty into opportunity (Knuppel, 2024). To encourage responsible gambling and reduce the possible harm associated with excessive or problematic gambling, it is essential to comprehend risk perception in the context of sports betting. Sports betting companies also empower people to make informed decisions, responsibly manage their gambling activities, and reduce the likelihood of developing gambling-related problems, by addressing people's perceptions of risk through education, awareness, and regulatory initiatives (Gainsbury et al., 2018).

Slovic (2000) argued that people's assessment and interpretation of risks they experience constitute a complex process of risk perception (Rohrmann, 2008). How one perceives risk is influenced by their concepts, ideas, and beliefs, among other things. Sjöberg (2000, p. 1) describes risk perception as *"*[a] *phenomenon in search of an explanation"*.

1.3 Need for the Study

This research study endeavours to uncover the intricacies of risk perception within the realm of sports betting, given its rapid expansion and widespread popularity as one of the most prevalent

forms of gambling globally. Considering its popularity, it is essential to comprehend risk perception since such understanding could be a cornerstone for encouraging more responsible gambling behaviours.

In the domain of sports betting, previous studies have investigated the correlation between risk perception and gambling behaviour, employing diverse theoretical frameworks such as ‘Prospect Theory’ (Botella-Guijarro et al., 2020). Within the framework of sports betting, this thesis seeks to examine how demographic variables—such as age, gender, and media portrayals—affect individuals' perceptions of risk and vulnerability to sports betting, excluding virtual sports. The outcomes of this study enhance comprehension of the intricate relationship between demographic traits and sports betting conduct, offering significant perspectives for decision makers and professionals involved in the prevention and treatment of gambling addiction.

Despite substantial research conducted on the subject, particularly regarding sports betting, there remains a notable gap in understanding the influence of demographic factors like age, gender, employment status, level of education, and income on problem gambling behaviour.

Therefore, this study aims to contribute towards addressing this gap by examining how demographic factors influence individuals' risk perceptions and susceptibility to problem gambling in sports betting.

1.4 Research Objectives and Research Question

This research study contributes towards addressing the abovementioned gap by examining how the mentioned demographic factors influence individuals' risk perceptions and susceptibility to problem gambling in sports betting. Specifically, the following are the research objectives which this study aims to achieve:

Objective 1: To examine the influence of five selected demographic factors (i.e., age, gender, employment status, level of education and income) on risk perceptions related to sports betting.

Objective 2: To investigate the relationship between five selected demographic factors (i.e., age, gender, employment status, level of education and income) and susceptibility to problem gambling in the context of sports betting.

Objective 3: To explore the interactions between five selected demographic factors (i.e., age, gender, employment status, level of education and income) in shaping individuals' risk perceptions and susceptibility to problem gambling in sports betting.

The research question, towards addressing Objectives 1 – 3, is as follows:

Research Question: How do the five selected **demographic factors**-i.e., age, gender, employment status, level of education, and income—interact to affect risk perception and susceptibility to problem gambling in sports betting?

1.5 Scope and Limitations

In this section, the scope and limitations of the study are presented, clarifying the parameters of the research and acknowledging any potential limitations that may impact the conclusions drawn. The scope of this study encompasses individuals' risk perceptions and susceptibility to problem gambling within the realm of sports betting, excluding considerations related to virtual sports. The thesis investigates the influence of the following demographics: age, gender, level of education, employment status, income, and media portrayal, on sports betting behaviours. By examining these influences, the research aims to enhance our understanding of the factors that drive sports betting behaviour across diverse demographic groups.

The study incorporates primary data from an array of foreign and local literature. However, the research methodology will be solely distributed and applied to individuals within the local demographic of Malta.

1.6 Dissertation Outline

Figure 1.1 provides an outline of the structure of this thesis.

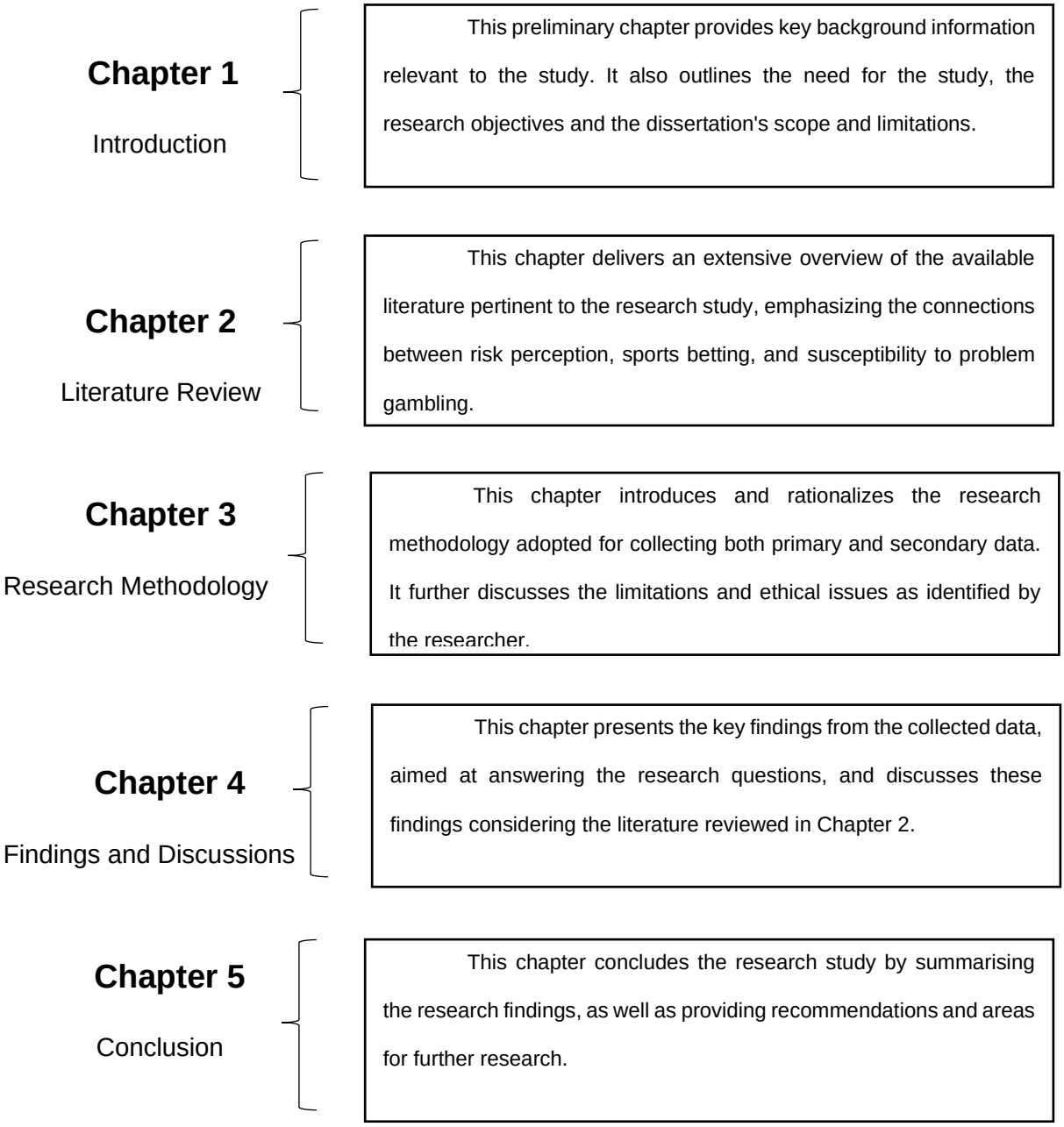

Figure 1.1: Dissertation Outline

1.7 Concluding Remarks

This introductory chapter laid the foundation for the research, providing essential background definitions and information, and emphasising the significance of the study. It outlined the key objectives and the research question, while acknowledging the scope and outlining the limitations of the work. Lastly, it presented the structure of the dissertation, providing a roadmap to the reader, and an understanding of the study's focus and direction.

Chapter 2

Literature Review

Chapter 2: Literature Review

2.1 Introduction

This chapter provides a rigorous analysis of existing literature relevant to the research question, aiming to offer a comprehensive understanding of the complex dynamics underlying risk perception and sports betting behaviour. Section 2.2 begins with an exploration of Prospect Theory, a key theoretical framework that analyses how individuals evaluate risk and reward in uncertain situations, particularly in the context of gambling. The chapter then moves on to examine, in section 2.3, the correlation between Risk Perception and Susceptibility to Problem Gambling, highlighting the relationship between individuals' risk assessments and their vulnerability to developing problem gambling behaviours. Section 2.4 then delves into the correlation between Risk Perception and Demographics, exploring how various demographic factors such as Age (see section 2.4.1), Gender (see section 2.4.2), Employment Status (see section 2.4.3), Level of Education (see section 2.4.4), and Income (see section 2.4.5) influence individuals' perceptions of risk in sports betting. Finally, section 2.5 summarises the key insights gained from the literature review.

2.2 Prospect Theory

Prospect theory, a psychological theory developed by Daniel Kahneman and Amos Tversky in 1979, represents a fundamental shift in understanding how individuals make decisions in risky uncertain situations. It challenges the traditional economic models, particularly Expected Utility Theory (EUT), which assumes that individuals act rationally to maximise their utility. Unlike EUT, prospect theory posits that people evaluate potential outcomes relative to a reference point,

typically their current situation or income level, rather than focusing solely on the final outcome (Kahneman & Tversky, 1979).

One of the central ideas of prospect theory is loss aversion, which suggests that losses weigh more heavily on individuals than equivalent gains. For instance, the emotional impact of losing $100 is typically more intense than the pleasure derived from gaining $100 (Gal & Rucker, 2018). This principle of loss aversion is pivotal to understanding human behaviour in the face of risk and has been confirmed by numerous empirical studies. Kahneman and Tversky (1979) demonstrated through their research that people tend to avoid risks when a potential gain is involved but are more likely to take risks to avoid a loss, even if the potential outcomes are mathematically identical.

To illustrate the difference between EUT and prospect theory, it is important to revisit the foundational concepts of Expected Utility Theory. Initially proposed by Bernoulli in 1738, EUT was later refined by John von Neumann and Oskar Morgenstern in 1944. The theory suggests that when faced with risky decisions, individuals calculate the expected utility of each option by considering all possible outcomes and their associated probabilities, then choose the option with the highest expected utility (Schoemaker, 2007). This model assumes that people have consistent and stable preferences, and make rational decisions to maximise their overall well-being.

However, Kahneman and Tversky (1979) observed that EUT often fails to predict real-world decision-making, especially in scenarios involving risk and uncertainty. They argued that the rational actor model of EUT does not account for the psychological complexities and cognitive biases that influence human behaviour. For instance, individuals do not always act to maximise expected utility; instead, their decisions are often influenced by how choices are framed and the potential for losses or gains (Kahneman & Tversky, 1979). This led to the development of prospect theory as an alternative model that better reflects observed behaviour.

Framing effects are a crucial component of prospect theory. The way a decision is presented, or "framed," can significantly impact the choices people make. Kahneman and Tversky (1979) demonstrated that when options are framed in terms of potential gains, individuals tend to be risk-averse, preferring to secure a certain gain rather than gamble for a larger one. Conversely, when the same options are framed in terms of potential losses, individuals are more likely to take risks to avoid those losses. This tendency is not predicted by EUT, which would expect consistent decision-making regardless of how options are presented.

Another important aspect of prospect theory is probability weighting. According to this concept, people do not perceive probabilities in a linear fashion. They tend to overestimate the likelihood of rare events and underestimate the likelihood of more probable events. This bias leads to decisions that deviate from the predictions of EUT. For example, people might irrationally favour lottery-like bets with very low odds but high potential payoffs, despite the low expected utility of such bets. Kahneman and Tversky (1979) argued that this bias is a significant factor in understanding gambling behaviour, where individuals frequently engage in risky bets that EUT would suggest they should avoid.

The implications of prospect theory extend to various domains, including gambling behaviour, where it provides a more accurate model of decision-making than EUT. Levy (1992) highlights that EUT does not adequately explain why individuals engage in gambling, particularly on low-probability events where the expected utility is negative. EUT assumes that rational actors should avoid such risks due to the principle of diminishing marginal utility, where the subjective value of additional money decreases as wealth increases. However, prospect theory suggests that the overvaluation of small probabilities and the impact of loss aversion can lead to irrational gambling behaviours that deviate from what EUT would predict.

Tvede (2002) further elaborates on the practical implications of prospect theory, emphasising its relevance in economic psychology. He notes that individuals exhibit an irrational tendency to be more willing to gamble with losses than with gains, reflecting the theory's core idea that people are more sensitive to potential losses than equivalent gains. This insight is particularly relevant in understanding why individuals might continue to gamble even after experiencing losses, as they are driven by the desire to recover lost ground, a behaviour that is inconsistent with the predictions of EUT.

Moreover, prospect theory provides a framework for understanding risk-seeking behaviour in the context of financial decisions and investments. Kahneman and Tversky (1979) observed that individuals are often willing to take greater risks to avoid losses, even when such risks might not be rational from an expected utility perspective. This behaviour is evident in financial markets, where investors might hold onto losing stocks in the hope of a recovery, rather than cutting their losses—a phenomenon known as the disposition effect.

Schoemaker (2007) also highlights the broader implications of prospect theory in fields such as behavioural economics and decision sciences. He points out that by accounting for the psychological factors that influence decision-making, prospect theory provides a more realistic and comprehensive model for understanding human behaviour. This has led to its widespread adoption in various disciplines, from economics and finance to public policy and healthcare, where understanding how people make decisions under uncertainty is crucial.

In summary, prospect theory offers a comprehensive and empirically validated model of decision-making under risk and uncertainty. It challenges the traditional assumptions of Expected Utility Theory by incorporating the psychological factors that influence how individuals perceive and react to potential gains and losses. By introducing concepts such as loss aversion, framing effects, and probability weighting, prospect theory provides a more accurate and nuanced understanding of

human behaviour, particularly in contexts where risk and uncertainty play a central role. This has profound implications for fields ranging from economics and finance to public policy and behavioural science, where predicting and influencing decision-making is essential.

2.3 The correlation between Risk Perception and Susceptibility to Problem Gambling

Understanding how gamblers perceive and evaluate risk is fundamental to comprehending why certain individuals expose themselves to gambling-related harm (Johansson et al., 2009). The choices gamblers make, particularly when faced with risky options, are not only central to the activity of gambling itself but also indicative of broader cognitive and emotional processes. Gambling inherently involves uncertainty, insofar as the outcomes are unpredictable and the possible outcomes often present the potential for significant loss. Thus, how individuals perceive risk plays a pivotal role in their decision-making processes. Research within the fields of risk and health behaviour supports the idea that when gamblers confront risky scenarios, their personal perceptions of the risks involved significantly shape their intentions and subsequent actions (Ajzen, 2011). In fact, studies have consistently shown that gamblers' subjective assessments of key risk parameters, such as the range of possible outcomes and their likelihood, are critical in determining their engagement with risky behaviours (Weber et al., 2002).

For instance, when gamblers are presented with a range of potential outcomes, their perception of the desirability and likelihood of these outcomes influences not only their choices but also their emotional and psychological responses. Those who underestimate the likelihood of negative outcomes or overestimate the potential for positive results may be more inclined to take risks, leading to behaviours that increase their susceptibility to problem gambling. Weber et al. (2002) suggest that the ways gamblers interpret critical risk parameters—such as the nature of potential

outcomes, the probability of these outcomes occurring, and factors that may sway the odds in their favour—are integral to understanding their decision-making processes.

However, the way individuals perceive risk is not uniform across all gamblers. According to Delfabbro (2004), perceptions of the factors that influence gambling outcomes vary considerably among individuals. These perceptions often depend on personal beliefs, past experiences, and cognitive biases, which together shape how people interpret the consequences of their gambling decisions. Furthermore, certain attitudes toward gambling, particularly those related to overconfidence in one's abilities or skewed views of probability, have been linked to higher susceptibility to problematic gambling behaviour (Toneatto, 1999). For example, some gamblers—particularly those who are more deeply engaged or have developed addictive tendencies—are more likely to misjudge the level of skill involved in gambling or overestimate their chances of winning (Delfabbro, 2004). These individuals often engage in gambling as a coping mechanism, using it to relieve stress, escape from personal issues, or enhance their mood (Shead et al., 2008).

These findings highlight the complex relationship between risk perception, motivation, and gambling behaviour, yet they do not provide a complete explanation of how individuals make decisions in the face of perceived gambling risks. The cognitive processes underlying these decisions are multi-faceted and influenced by a variety of psychological and emotional factors. For instance, while gamblers' expectations of winning may be driven by cognitive distortions—such as the illusion of control or the gambler's fallacy—these cognitive biases do not fully account for their risk-taking behaviour. There is a growing consensus that emotional states, such as stress, anxiety, or even excitement, play a crucial role in shaping risk perception and gambling choices. Moreover, gamblers' motivations—whether to achieve financial gain, seek thrill, or escape reality—can further skew their risk perceptions and increase their susceptibility to gambling-related harm.

In many reviews and theoretical models of gambling behaviour, such as those by Goudriaan et al. (2004) and Blaszczynski and Nower (2002), the focus is often on the role of cognitive distortions and heuristics that lead gamblers to overestimate their chances of success or believe they can exert control over random outcomes. These cognitive biases are frequently cited as key factors that drive risky gambling behaviour. However, these models often overlook the explicit attitudes and beliefs that gamblers hold regarding the potential negative consequences of their actions. This omission is significant because attitudes toward risk are not solely about the perceived likelihood of winning or losing, but also encompass beliefs about the broader impacts of gambling, such as financial loss, emotional distress, and social consequences.

Several well-established models from other domains of risky choice behaviour, such as the Theory of Planned Behavior (Ajzen, 2011) and the Health Belief Model (Glanz et al., 2008), suggest that this narrow focus on cognitive distortions and outcome control fails to capture important dimensions of risk perception. These models emphasise that individuals' behaviour is influenced not only by their expectations of success but also by their attitudes toward potential negative outcomes and their beliefs about the severity and personal relevance of those outcomes. For example, in the Health Belief Model, individuals are more likely to engage in risky behaviour when they perceive the benefits to outweigh the costs and when they believe they are not personally susceptible to the negative consequences of that behaviour. Applying this framework to gambling, it becomes clear that gamblers' decisions to engage in risky behaviour may be influenced by their underestimation of the potential harms of gambling or by a belief that they can mitigate or avoid those harms through their own actions.

In conclusion, while existing research has made strides in linking risk perception to gambling behaviour, there is still much to be explored regarding the specific ways in which individuals assess and respond to gambling-related risks. Gamblers' decisions are shaped by a complex interplay of

cognitive, emotional, and motivational factors, and understanding this interplay is crucial for developing effective interventions to reduce gambling-related harm. By incorporating insights from broader theories of risk perception and behaviour, future research may be able to offer a more comprehensive understanding of the mechanisms that drive risky gambling behaviour and how these mechanisms contribute to the development of problem gambling.

2.4 The correlation between Risk Perception and Demographics

Risk perception is a multifaceted construct shaped by a combination of emotional, social, and cognitive factors, all of which influence an individual's behaviour in situations involving uncertainty. Siegrist et al. (2005) argue that it is crucial to identify the characteristics that contribute to individual differences in risk perception to understand how people assess and respond to risks. Karanikas and Chionis (2018) highlight that factors such as personality, prior experience, beliefs, age, gender, education level, and expertise play significant roles in shaping how risks are perceived. These elements, coupled with the inherent cognitive biases that individuals possess, contribute to variations in how risks are assessed and acted upon.

Given the significant impact that risk perception has on decision-making, particularly in areas involving high stakes such as gambling, it is essential to understand how different demographic groups perceive risk (Kim et al., 2016). People's perception of risk is moulded by their social and personal traits, which in turn affect their cognitive processes and responses to risk (Schmidt, 2004). Understanding these perceptions is not only crucial for predicting behaviours but also for designing interventions aimed at mitigating the negative consequences associated with risky behaviours, such as problem gambling.

The following subsections explore how key demographic factors—including age, gender, media portrayal, and income—impact individuals' risk perceptions and their susceptibility to problem gambling in sports betting. Each subsection provides a comprehensive examination of these factors, highlighting their significance in influencing gambling behaviours and their implications for public health and policy interventions.

2.4.1 Age

Age is a critical demographic factor that significantly influences risk perception and gambling behaviour. The relationship between age and risk perception is complex and dynamic, with changes in how individuals perceive risk often occurring as they age. Younger individuals, particularly adolescents and young adults, are generally more prone to engaging in risky behaviours, including gambling, due to their developmental stage. According to Millstein et al. (2002), adolescents and young adults often have an underdeveloped sense of risk, which makes them more susceptible to engaging in activities that older adults might avoid due to the perceived risks involved.

This heightened risk-taking behaviour in younger populations can be attributed to several factors, including cognitive immaturity, a sense of invulnerability, and the influence of peer pressure. During adolescence, the brain's prefrontal cortex, which is responsible for decision-making and impulse control, is still developing. This neurological factor, combined with a strong desire for social acceptance and the excitement of novel experiences, contributes to a lower perception of risk and a higher likelihood of engaging in gambling activities. The accessibility and allure of online sports betting platforms, which often target younger audiences, further exacerbate this trend.

As individuals age, their risk perception tends to evolve, influenced by accumulated life experiences, increased responsibilities, and a greater awareness of the consequences of risky

behaviours. Older adults, particularly those in their 30s and 40s, may perceive risks more acutely and approach gambling with more caution. However, research indicates that sports betting remains popular across various age groups, with certain age brackets exhibiting distinct patterns of behaviour. For example, Abebe and Adamu (2023) note that early adults, particularly those aged 21 to 30, are among the most active participants in sports betting, a trend that may be driven by factors such as social influence, the rise of digital betting platforms, and the cultural normalisation of gambling as a form of entertainment.

A survey conducted in the United States in December 2021 revealed that individuals aged 35 to 40 had the highest percentage of weekly sports wagering, with 15 percent of respondents in this age group identifying as regular sports bettors (Participation in Sports Gambling in U.S. 2021, by Age, 2023). This finding suggests that while risk perception may change with age, the appeal of sports betting persists, with different age groups responding to gambling opportunities based on their unique life circumstances, cognitive maturity, and social environments.

2.4.2 Gender

Gender differences in risk perception and gambling behaviour have been widely studied, with significant findings that highlight the influence of gender on how individuals perceive and engage in risky activities. Historically, gambling has been perceived as a predominantly male activity, with men more likely to engage in gambling due to cultural, social, and psychological factors. This gender disparity in gambling participation is reflected in numerous studies, including ongoing surveys by the UK Gambling Commission, which consistently show that men are twice as likely as women to participate in gambling activities (Wardle et al., 2011).

The underlying reasons for this gender difference in gambling behaviour are multifaceted. Men are generally perceived to be less risk-averse than women, a trait that is often linked to traditional gender roles and societal expectations. Flynn et al. (1994) suggest that men, due to their socialisation and life experiences, are more inclined to take risks and are less likely to feel vulnerable in risky situations. This lower perception of risk among men may lead them to engage more frequently in gambling activities, where the thrill of risk-taking and the potential for financial gain are significant motivators.

In contrast, women are typically more risk-averse, a characteristic that has been attributed to various factors, including caregiving responsibilities, lower decision-making authority in certain contexts, and greater emotional sensitivity to potential negative outcomes (Slovic, 2010). This heightened risk aversion among women often results in lower participation rates in gambling activities. However, it is essential to note that the landscape of gambling is changing, particularly with the rise of online gambling platforms that have made gambling more accessible to women. Shah (2022) highlights that the growing popularity of internet betting has led to a significant increase in the number of women participating in gambling, challenging the traditional notion that gambling is a male-dominated activity.

The motivations behind gambling also differ between men and women. Blanco et al. (2006) found that men are more likely to gamble for reasons related to impulsivity, excitement, and financial gain, while women tend to gamble as a means of managing emotions or coping with stress. This difference in motivation may also influence how men and women perceive the risks associated with gambling. For men, the potential rewards may outweigh the perceived risks, whereas women may be more cautious, focusing on the potential negative consequences of gambling.

Despite these differences, it is crucial to recognize that gender does not operate in isolation but intersects with other demographic factors such as age, socioeconomic status, and cultural background. These intersections create diverse experiences and perceptions of risk among different groups, underscoring the need for targeted interventions that address the unique needs and vulnerabilities of men and women in the context of gambling.

2.4.3 Employment Status

Employment status plays a crucial role in shaping both risk perception and gambling behaviour. Factors such as job security, income stability, and economic pressures can influence whether individuals view gambling as a potential opportunity or a financial risk (Nedeljković et al., 2023). Unemployed individuals may be more inclined to gamble in the hopes of improving their financial situation, while those who are employed might gamble for recreational purposes or as a form of stress relief. Understanding the relationship between employment status and gambling behaviour is vital for creating effective strategies to address gambling-related issues (Krisnanda et al., 2023).

A significant analysis, drawn from Victoria, Australia's largest gambling prevalence study, which surveyed a sample of 15,000 people, highlights important differences in gambling risk groups based on employment status for both men and women. The study found that men with full-time jobs were less likely to be classified as at-risk gamblers, with 64.4% not being at-risk, compared to 55.4% who were at-risk. In contrast, men working part-time were more likely to fall into the at-risk category, with 19.3% at-risk compared to 11% who were not. For women, unemployment was more strongly associated with gambling risk, with 7.8% of unemployed women being at-risk gamblers, compared to just 2.8% who were not classified as at-risk. Interestingly, no significant differences were observed between male and female risk groups in other employment categories. However, the study did reveal that the relationship between employment status and gambling risk differs by

gender—women not in the workforce were more likely to be at-risk gamblers than men, while men were more frequently employed full-time (Hing et al., 2015).

Supporting these findings, another study from Finland explored gambling behaviour across various employment categories, focusing on online gambling. This analysis, part of the Finnish Gambling 2019 population study, included a sample of 3,077 adults aged 18–74 who had gambled in the past year. The study found that men in full-time employment and women who were students or homemakers were more likely to engage in online gambling. Additionally, individuals who were unemployed or had lower incomes were found to be at a higher risk for gambling-related issues, potentially driven by financial stress and the hope of winning money (Lind et al., 2021).

These findings underscore the significant impact that employment status can have on gambling behavior and risk perception. Full-time employment appears to offer some protection against gambling-related risks, particularly for men, while unemployment or part-time work may increase vulnerability to gambling problems. For women, not being in the workforce is also associated with a higher likelihood of gambling risk. This suggests that interventions to address gambling-related issues need to consider employment status and economic factors, especially among at-risk populations. Understanding these dynamics is essential for developing targeted strategies to reduce the harm caused by gambling across different employment groups.

2.4.4 Level of Education

Education level is a critical demographic factor that profoundly affects how individuals perceive risk and engage in gambling activities. People with different educational backgrounds often approach gambling with distinct attitudes and behaviours. Education also plays a role in shaping financial stability, which can impact gambling habits. Furthermore, education can affect individuals' overall

life circumstances and opportunities, which in turn can influence their gambling behaviour (Livazović & Bojčić, 2019). By exploring how different levels of education impact gambling tendencies, we can gain a deeper understanding of the factors driving gambling behaviour and the potential risks associated with various educational backgrounds.

According to survey data collected from nearly 15,000 Australian sports fans, educational attainment has a significant influence on betting frequency. Individuals with trade qualifications bet 6.3 times less frequently than those who did not complete high school, while those with university degrees bet 15.3 times less often. This analysis highlights a clear correlation between higher levels of education and reduced betting behaviour (Seal et al., 2022).

Education can significantly impact sports betting by enhancing one's understanding of probability and statistics, which aids in analysing data and making informed decisions. It fosters critical thinking and analytical skills, helping individuals assess betting strategies and avoid common pitfalls (Di Censo et al., 2023). Additionally, higher education often leads to a deeper knowledge of the sport being bet on, including its nuances and influencing factors. Educated individuals might also have better access to resources, such as research and statistical tools, which can further refine their betting strategies (Shen, 2023).

2.4.5 Income

Income is another significant demographic factor that influences risk perception and gambling behaviour. Research has consistently shown that there is a correlation between income levels and the prevalence of problem gambling. Individuals with lower incomes are more likely to engage in gambling activities as a means of improving their financial situation, despite the high risks involved. This paradoxical behaviour, where those with the least financial resources are the most likely to

gamble, underscores the complex relationship between income, risk perception, and gambling behaviour.

Welte et al. (2004) found that lower-income individuals are more susceptible to problem gambling, partly because they allocate a larger percentage of their income to gambling compared to higher-income individuals. This disproportionate expenditure on gambling can have devastating consequences, leading to financial hardship and, in extreme cases, poverty. MacDonald (2004) supports this finding, noting that while higher-income individuals may spend more on gambling in absolute terms, the impact of gambling losses is more acutely felt by those with lower incomes.

The relationship between income and problem gambling is further complicated by the psychological impact of financial stress. Individuals facing economic difficulties may perceive gambling as a viable solution to their problems, driven by the hope of a substantial win that could alleviate their financial woes. However, this perception is often misguided, as the likelihood of winning is generally low, and the risks of financial loss are high. The cycle of gambling and financial loss can lead to increased stress, depression, and other mental health issues, further exacerbating the individual's financial and personal difficulties.

Interestingly, studies on the relationship between socioeconomic status and sports betting have produced mixed results. While some research, such as the prevalence survey by Weltet et al. (2002), suggests that lower socioeconomic status is associated with lower levels of sports betting activity, other studies indicate the opposite. For example, Humphreys and Soebbing (2012) found that individuals with lower household incomes were more likely to engage in sports betting, possibly due to the perception that sports betting offers a more controllable and skill-based form of gambling compared to other gambling activities.

Conversely, other studies suggest that problem gambling, particularly in sports betting, is more prevalent among professionally employed individuals with above-average incomes. Hing et al. (2016a) and Russell et al. (2019a) found that individuals with higher incomes are more likely to experience gambling problems, partly because they have more disposable income to gamble with. These findings highlight the importance of considering not just income level, but also how individuals perceive and manage their financial resources in the context of gambling.

One of the most significant developments in sports betting that has been linked to higher income levels is in-play betting. In-play betting allows individuals to place bets on a sports event while it is ongoing, with odds that fluctuate based on the event's progress. This form of betting is particularly popular among younger, more educated, and higher-income individuals, who are drawn to the excitement and engagement that in-play betting offers. Killick and Griffiths (2019) suggest that in-play betting can increase bettors' involvement and risk exposure, as the dynamic nature of the betting environment encourages more frequent and impulsive betting.

Gainsbury et al. (2020) found that in-play bettors are more likely to be employed, younger, and have higher levels of education, indicating that this form of betting appeals to a demographic that is both financially and technologically savvy. However, the increased risk exposure associated with in-play betting also raises concerns about the potential for problem gambling among this group. The ability to place multiple bets during a single event, combined with the immediacy of outcomes, can lead to higher levels of gambling involvement and, potentially, greater financial losses.

In conclusion, the correlation between income and gambling behaviour is complex and multifaceted, with different income groups exhibiting distinct patterns of behaviour and risk perception. While lower-income individuals may be more vulnerable to problem gambling due to financial stress and

the allure of a quick win, higher-income individuals may also be at risk due to their greater financial resources and the appeal of sophisticated betting options such as in-play betting. Understanding these dynamics is crucial for developing effective interventions that address the specific needs of different income groups and promote responsible gambling practices across all socioeconomic strata.

2.5 Concluding Remarks

This chapter provided a thorough analysis of the existing literature relevant to the research question. Investigating the key concepts supporting research in this field was crucial to understanding the complex dynamics underlying risk perception and sports betting behaviour. This section clarified the major theoretical perspectives, particularly Prospect Theory, which have been instrumental in shaping the understanding of risk perception and betting behaviour. This chapter further analysed the influence of demographic factors on individuals' perceptions of risk in sports betting, examining how these characteristics shape different groups' responses to betting risks. Understanding the role of these demographic variables is crucial for gaining a comprehensive insight into betting behaviours, as each factor contributes to unique patterns of vulnerability, risk tolerance, and engagement in sports betting.

Chapter 3

Research Methodology

Chapter 3: Research Methodology

3.1 Introduction

This chapter provides a comprehensive explanation of the research methodology used to meet the three research objectives and to answer the research question. Section 3.2 offers a brief commentary on the preliminary research conducted. Section 3.3 details the chosen research methodology, justifying the decision by explicitly referencing the nature of the research objectives. Section 3.4 outlines the research strategy employed, followed by a description of the data collection process. Section 3.5 denotes the ethical considerations. Finally sections 3.6 and 3.7 explain the research limitations and conclude with an overview of the chapter, respectively.

3.2 Literature Review

To achieve a comprehensive understanding of the research topic, preliminary research was conducted by critically evaluating existing literature, both foreign and local. The primary literature sources for this study included peer-reviewed academic papers and journals, books, dissertations, and online sources from relevant bookmakers. Due to the limited availability of Maltese literature on the subject, greater emphasis was placed on foreign literature. These sources enabled the researcher to expand their knowledge of the topic and establish the foundation for this research study.

3.3 Methodological Choice

Knowledge in a particular field is gathered and broadened through research (Saunders, Lewis et al. 2007). Kennedy and Edmonds (2016, p.2) describe a research design as "the structure of investigation, conceived so as to obtain the "answer" to research questions or hypotheses". The

quantitative method, the qualitative method, and the mixed technique are the three research design methodologies (Creswell 2009). The research topic being explored, the study strategy, the researcher's personal experiences, and the selected data collecting and analysis methodologies all play a role in the researcher's decision on which research design to choose (Creswell 2009).

Furthermore, Yilmaz (2013) argues that determining the appropriate research approach depends on a number of factors, including the study's intended audience. But as Guba and Lincoln (1994) pointed out, choosing the appropriate paradigm has to come before choosing the study techniques. This is so that the research strategy and methods can be chosen with the assistance of the assumptions included in the research philosophy (Saunders, Lewis et al. 2007).

According to Saunders, Lewis, et al. (2019), quantitative research makes use of any method for gathering data or doing data analysis that produces or depends on numerical data, enabling generalisation of results (Kumar 2019). Moreover, qualitative research uses qualitative data to gather and analyse information (Bell, Bryman, et al. 2019). According to Patton (2002), this methodology takes an exploratory approach, which allows the researcher to gain a thorough understanding of the cases and situations being studied (Johnson, Christensen 2020). To get beyond the drawbacks of both quantitative and qualitative approaches, a mixed methodology can be employed (Mackey, Bryfonski 2018). The choice of research methodology should take the aim of the study and the intended application of the findings into account (Kumar 2019).

3.3.1 The Methodological Approach Choice: Quantitative Technique

Given that it aligns with the nature of the study objectives outlined in Section 1.4, the quantitative technique was deemed to be the most appropriate research methodology approach. A quantitative approach allows for the collection and analysis of numerical data, which is essential for identifying patterns and correlations between demographic factors such as age, gender, income and media portrayal, and their impact on risk perceptions and susceptibility to problem gambling. This approach enables the use of statistical techniques to rigorously test hypotheses and draw objective conclusions (Saunders, Lewis et al. 2019). Additionally, quantitative methods facilitate the use of large sample sizes, ensuring that the findings are generalizable and representative of the population under study. Moreover, the ability to quantify variables allows for precise measurement and comparison, which is particularly useful in a comparative analysis. Lastly, the structured nature of quantitative research ensures that the study can be replicated and validated by other researchers, enhancing the reliability and credibility of the findings (Creswell 2009).

3.4 Research Instrument

The data collection method employed in this study is a survey. A survey is a method where respondents are required to respond to a uniform set of pre-established questions, often with specific, predefined response options (Sekaran & Bougie, 2016). Surveys are predominantly utilised in quantitative research, where data is gathered from a relatively large group of participants (Sekaran & Bougie, 2016). Typically, the survey targets a sample representative of the entire population. By collecting responses, surveys produce results that can potentially be generalised to the broader population (Rowley, 2014).

The survey questionnaire (see Appendix A) is divided into five key sections: Demographic Information, Gambling Behaviour, Risk Perception, Susceptibility to Problem Gambling, and Financial Implications of Sports Betting. Each section is intended to offer an in-depth perspective on how various demographic characteristics impact risk perception and vulnerability to problem gambling in sports betting.

3.4.1 Survey Design

Given the time and resource constraints of the dissertation, a self-administered survey has been selected as the research tool. This format allows respondents the flexibility to complete the survey at their convenience, which can be beneficial in managing their time. However, this approach may introduce some bias, as responses can vary significantly depending on when and by whom the survey is completed (Zikmund, Babin et al., 2013). For distribution, the study uses an electronic medium. Electronic surveys offer an efficient and cost-effective way to reach a large audience, allowing for quick dissemination and collection of responses (Sekaran & Bougie, 2016).

Additionally, the electronic format facilitates the automatic processing of data, further saving time. One common cause of survey failures is participants' difficulty in understanding or completing the questions. Additionally, participants may lose interest or find the survey unappealing (Boynton, 2004).

3.4.2 Data Collection

Survey questionnaires were incorporated into this study to draw generalised conclusions from the entire population in Malta, in alignment with the research objectives. Specifically, quantitative data were collected from both individuals who engaged in sports betting and those who did not. Including

non-betters in the survey was crucial, as it allowed for a comprehensive analysis of how risk perception varied between those who participated in sports betting and those who abstained. Understanding the perspectives of non-betters provided valuable insights into broader societal attitudes towards sports betting, potential barriers to participation, and the factors that influenced decision-making regarding sports betting. This comparative analysis helped identify differences in risk awareness and perception, contributing to a more nuanced understanding of the overall population's views on sports betting. Data collection took place over the course of a month, throughout June 2024 and July 2024.

3.4.3 Survey Sample Size

A sample represents the subset of individuals who participate in a study and is essential when it is impractical to collect data from an entire population (Saunders, Lewis, et al., 2016). Samples are composed of members chosen from a broader population (Sekaran & Bougie, 2016) and are crucial for making a study manageable. To facilitate the generalisation of the study's findings to the broader population, probability sampling methods were utilised.

In this study, the margin of error was calculated to understand the precision of our estimates within the broader population (Hanneman, Kposowa et al. 2012). Using a 95% confidence level, which is a common standard in research (Saunders, Lewis, et al., 2016), and considering the sample size of 285 respondents, the margin of error was determined to be 5.8%. This margin of error indicates that the true population parameter is expected to fall within 5.8 percentage points of the survey estimate, 95% of the time. According to Rumsey (2005, p. 115), a margin of error is defined as “the amount by which you expect the sample results to vary from sample to sample.” This concept is essential for evaluating how representative sample results are of the broader population and

assessing the potential for generalisation. In this study, the margin of error provides a range within which the true population parameter is likely to fall. DataStar (2008) supports this interpretation, indicating that a margin of error of less than 8% is considered relatively small and thus allows for reasonable generalisations of the findings to the population.

3.4.4 Data Analysis

The data gathered from the survey responses was imported into a spreadsheet to facilitate quantitative analysis using IBM® SPSS® Statistics version 29.0, which was employed to generate the statistical tables and graphs presented in the Chapter 4. A Regression Test and Spearman Correlation were applied to gain deeper insights. The Regression Test assesses how variations in one or more predictor variables impact a dependent variable, providing predictions and evaluating the strength and nature of these relationships (Jackson, 2009). The Spearman Correlation, on the other hand, is employed to measure both the strength and direction of the association between two ranked variables. This statistical method is particularly useful for assessing whether changes in one variable correspond to changes in another in a consistently increasing or decreasing manner, without assuming a linear relationship (Croux & Dehon, 2010).

If the P-value derived from these statistical tests is below the 0.05 significance threshold, the null hypothesis is rejected, signifying a statistically significant association between the variables examined. Conversely, if the P-value exceeds 0.05, the null hypothesis is upheld, indicating no significant association between the variables.

3.5 Ethical Considerations

In alignment with the University of Malta's Code of Ethics and guidelines, the research was meticulously designed to address several key ethical considerations, ensuring that it was conducted with the utmost integrity and respect for the participants. The researcher took comprehensive steps to obtain informed consent by providing a detailed explanation of the study's purpose, procedures and benefits. This process ensured that participants fully understood what their involvement entailed and could voluntarily agree to participate without any form of coercion or undue influence.

To safeguard participant privacy, confidentiality and anonymity were rigorously maintained. Personal data was handled with the highest level of security, and any identifying information was de-identified whenever possible. Participation in the study was entirely voluntary, with clear communication that participants could withdraw at any stage without facing any negative consequences or compromising their standing in any way.

The survey was carefully designed to minimise any potential discomfort for participants. The researcher ensured that questions were phrased sensitively and that the overall survey experience was as comfortable as possible. Data collected was used strictly for the purposes specified and reported with complete accuracy. Any potential misrepresentation or manipulation of results was avoided to maintain the reliability and validity of the findings.

Additionally, the researcher took proactive measures to avoid any potential harm to participants, including psychological or emotional distress. Cultural differences were respected throughout the survey process, ensuring that the study was conducted in a manner sensitive to the diverse backgrounds of participants. By adhering to these ethical principles, the research aimed to uphold

the highest standards of ethical practice and contribute valuable insights while protecting the rights and well-being of all participants involved.

3.6 Limitations

While this research provides valuable insights, it is important to acknowledge several limitations that may have affected the findings. First, the reliance on self-reported survey data may have introduced biases related to social desirability or inaccurate recall, particularly when it comes to sensitive behaviours such as gambling. Additionally, the study's sample may not be fully representative of the broader population, limiting the generalizability of the results. Although demographic factors such as age, gender, and income were included in the analyses, other potentially influential variables—such as cultural background, personal experiences with gambling, or psychological factors—were not considered. Future research could benefit from a more comprehensive model that includes these additional variables.

Another limitation lies in the cross-sectional nature of the study, which limits the ability to draw causal inferences from the data. While the analyses provide correlations between demographic factors and gambling behaviours, they cannot determine causality. Longitudinal studies would be useful in examining how gambling behaviours and risk perceptions evolve over time and whether demographic factors play a role in those changes.

3.7 Concluding Remarks

This chapter provided a comprehensive overview of the research methodology designed to address the objectives of this study. It detailed the preliminary research conducted, highlighting the importance of understanding the existing literature on gambling behaviours and demographic influences. The justification for selecting a quantitative methodology was clearly articulated,

emphasising its capacity to reveal patterns and correlations among various demographic factors and their impact on risk perception and susceptibility to problem gambling. The chapter also outlined the research instrument—a structured survey—along with the ethical considerations taken to ensure data integrity. Collectively, this chapter establishes a robust framework for analysing the data collected and contributes to a deeper understanding of the interplay between demographics and gambling behaviour.

Chapter 4

Findings and Discussion

Chapter 4: Findings and Discussion

4.1 Introduction

This chapter includes the key findings of the research study, based on the quantitative analysis of data obtained from 285 survey responses. Section 4.2 provides the Descriptive Statistics outlining the distribution of respondents by demographic factors. Sections 4.3 to 4.5 assess key survey questions by demographic characteristics, determining whether there is a significant association between age, gender, employment status, level of education, and income with participants' responses. Finally, Section 4.6 concludes the chapter, summarising the key insights derived from the data analysis.

4.2 Descriptive Statistics

The initial step in analysing the data collected from the survey is conducting a descriptive analysis. This stage is crucial as it provides a foundational understanding of the sample's demographic and behavioural characteristics, which are essential for contextualising the subsequent inferential analyses. Descriptive analysis involves summarising the basic features of the data, enabling a clear and straightforward interpretation of the primary trends and patterns present within the dataset (Mishra et al., 2019).

The purpose of descriptive analysis is twofold: first, to present a comprehensive overview of the survey participants, including their demographic profiles and gambling behaviours, and second, to identify any preliminary insights or patterns that may warrant deeper investigation in the later stages of analysis. By understanding the distribution of key variables, such as age, gender, income, and

education levels, as well as their gambling-related behaviours and perceptions, we can better frame the relationships that will be examined later in this chapter.

4.2.1 Distribution of Participants by Gender

The survey involved 285 participants, the mean of 1.62 indicates that the sample is relatively balanced between male and female participants, with a slight skew towards male respondents. The standard deviation of 0.501, which is fairly low, suggests that the gender distribution is concentrated around these two categories.

The minimum and maximum values (1 and 3, respectively) show that responses covered all three categories: male, female, and prefer not to disclose. However, with the mean closer to 2, it suggests that there were more male than female respondents, and a smaller proportion opted for "prefer not to disclose."

This nearly balanced distribution between genders is essential for the study, as it allows for meaningful analysis of gender differences in relation to income, risk perceptions, and susceptibility to problem gambling. The presence of a slightly higher proportion of male respondents provides an opportunity to explore any potential differences in gambling behaviour and attitudes towards risk between genders.

In summary, the gender distribution in the sample below shows a slight majority of male participants, providing a solid basis for analysing gender-related factors in the context of the study's objectives.

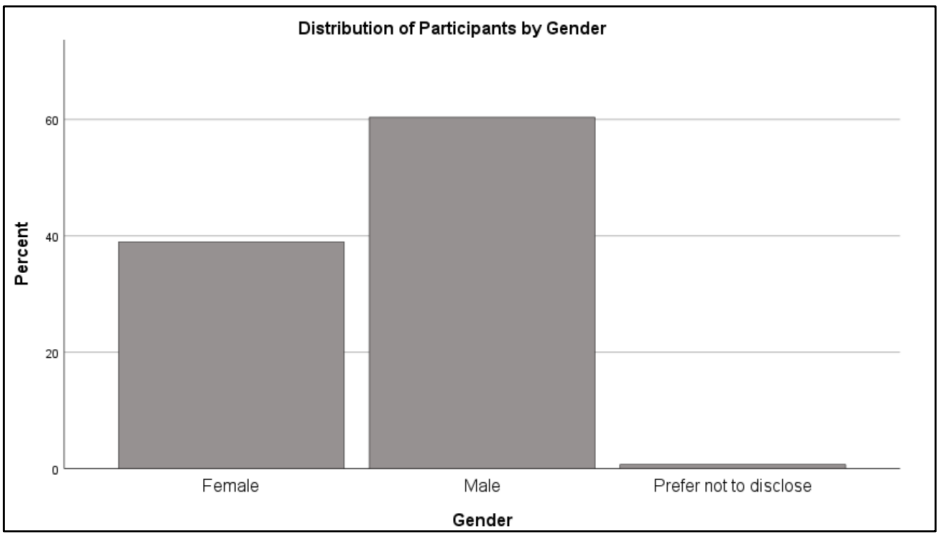

Figure 4.1: Gender

Table 4.1: Statistics - Gender

1. Gender		
N	Valid	285
Mean		1.62
Std. Deviation		.501
Minimum		1
Maximum		3

4.2.2 Distribution of Participants by Age

The survey data includes responses from 285 participants, with their ages categorized into six distinct groups. The descriptive statistics for age reveal key insights into the sample's age distribution.

The mean value for the age variable is 3.32, with a standard deviation of 1.506.

With a mean of 3.32, the average respondent falls between the 35-44 and 45-54 age ranges, indicating that the sample skews slightly towards middle-aged participants. The standard deviation of 1.506 suggests a moderate spread around the mean, indicating diversity in the age of participants, spanning younger adults to older age groups.

The minimum value of 1 and the maximum value of 6 confirm that participants from all the defined age categories are represented in the sample. This broad age range is crucial for examining how age may influence gambling behaviours, risk perceptions, and susceptibility to problem gambling. The inclusion of participants across the age spectrum allows for a more comprehensive analysis of how age interacts with other demographic factors in shaping gambling-related attitudes and behaviours.

In conclusion, the age distribution of the sample is centred on middle-aged participants, with representation from all age groups. This balanced distribution provides a solid foundation for analysing age-related differences in gambling behaviours and perceptions within the context of the study.

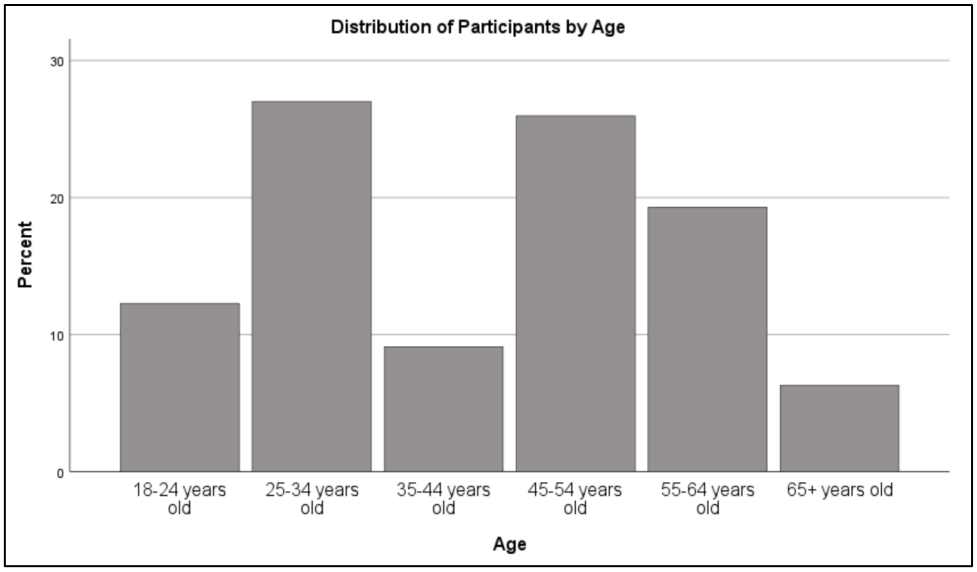

Figure 4.2: Age

Table 4.1: Statistics - Age

2. Age		
N	Valid	285
Mean		3.32
Std. Deviation		1.506
Minimum		1
Maximum		6

4.2.3 Distribution of Participants by Level of Education

The survey data also collected information on the educational attainment of the 285 participants, categorised into five distinct levels. The descriptive statistics for the level of education provide insight into the educational background of the sample.

The mean of 2.98 suggests that the average respondent falls between the post-secondary and undergraduate education levels. This indicates that the sample, on average, has a relatively high level of education, with many participants likely having completed some form of higher education beyond secondary school.

The standard deviation of 1.575 indicates a moderate level of variation in educational attainment among the participants. This variation suggests that while the majority of participants have achieved higher education levels, there is still significant representation across all levels of education, from primary to postgraduate.

The minimum value of 1 and the maximum value of 5 confirm that the sample includes participants from the full range of educational categories, from those with primary education to those with postgraduate qualifications. This diverse educational background is essential for examining how

educational attainment may influence perceptions of risk and susceptibility to problem gambling, particularly in the context of income and other demographic factors.

In summary, the distribution of education levels within the sample reveals that the majority of participants have attained at least a post-secondary level of education, with a significant number holding undergraduate or postgraduate degrees. This diversity in educational backgrounds provides a comprehensive basis for analysing how education interacts with other demographic factors in influencing gambling behaviours and perceptions.

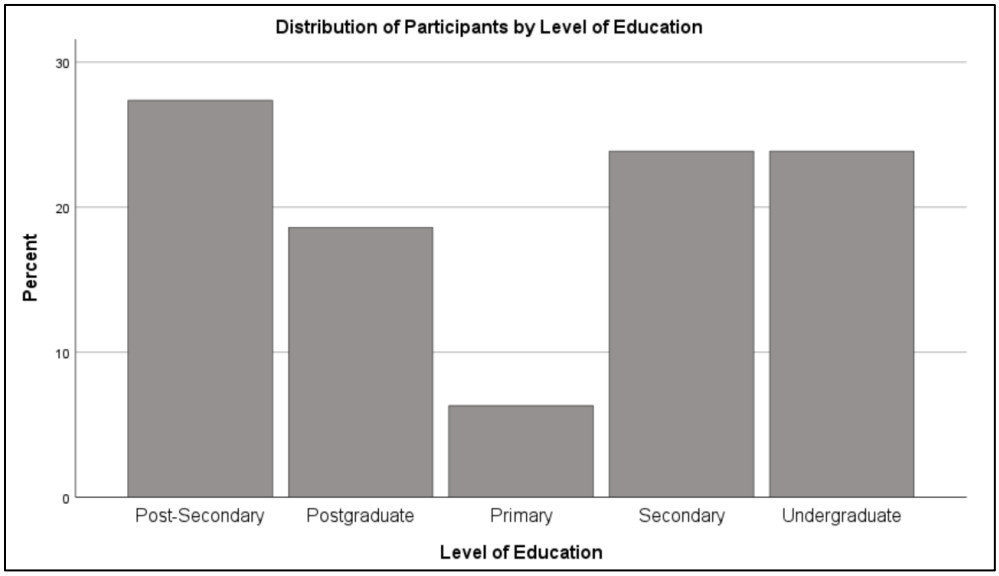

Figure 2.3: Level of Education

Table 4.2: Statistics - Level of Education

3. Level of Education		
N	Valid	285
Mean		2.98
Std. Deviation		1.575
Minimum		1
Maximum		5

4.2.4 Distribution of Participants by Employment Status

The survey data also captured the employment status of the 285 participants, which was categorised into six different groups. The descriptive statistics for employment status offer valuable insights into the professional and economic background of the sample.

The mean of 1.82 suggests that the average participant falls between full-time and part-time employment, indicating that a significant portion of the sample is employed in some capacity, with full-time workers likely being the most represented group. The relatively low mean also suggests that the sample may include fewer participants in categories such as retired, student, or unemployed.

The standard deviation of 1.429 indicates moderate variation in the employment status of the participants. This variation suggests that while the majority of participants are employed either full-time or part-time, there is also a noticeable presence of individuals who are unemployed, retired, students, or fall into other employment categories.

The minimum value of 1 and the maximum value of 6 confirm that participants represent the full spectrum of employment statuses defined in the survey. This diversity in employment status is

essential for exploring how different occupational backgrounds may influence gambling behaviours, risk perceptions, and susceptibility to problem gambling, especially when considering the impact of income as a moderating factor.

In conclusion, the employment status distribution in the sample is primarily concentrated around individuals who are either fully or partially employed, with representation across all defined employment categories. This distribution provides a robust foundation for analysing how employment status interacts with other demographic factors in shaping gambling-related attitudes and behaviours.

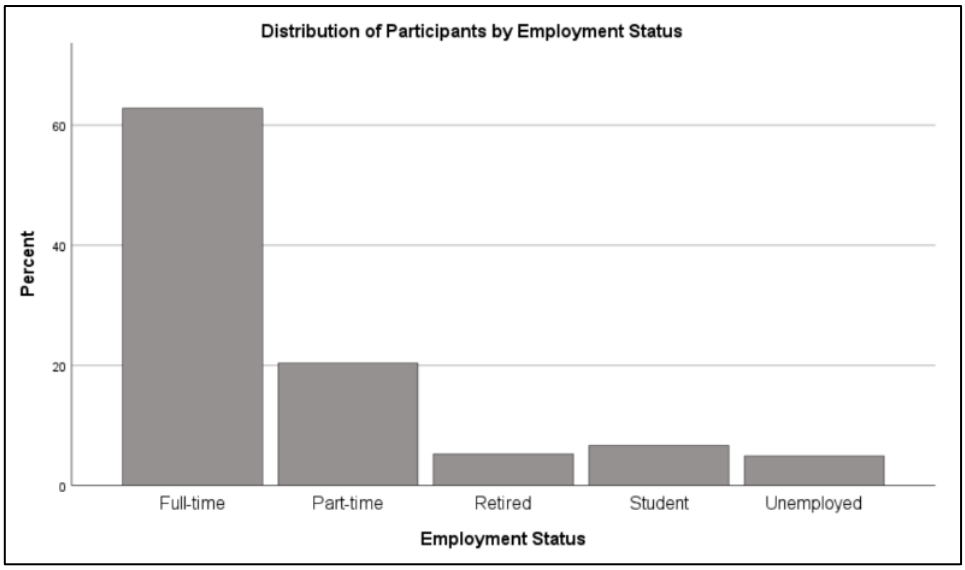

Figure 4.4: Employment Status

Table 4.4: Statistics - Employment Status

4. Employment Status		
N	Valid	285
Mean		1.82
Std. Deviation		1.429
Minimum		1
Maximum		6

4.2.5 Distribution of Participants by Income

The survey included an assessment of participants' income levels, categorised into six distinct ranges. The descriptive statistics for income provide insight into the economic profile of the 285 participants in the study.

The mean value for the income level variable is 2.54, with a standard deviation of 1.206 and the income level categories were coded as follows:

Table 4 3: Income level categories

1	€0 - €24,999
2	€25,000 - €49,999
3	€50,000 - €74,999
4	€75,000 - €99,999
5	€100,000 +
6	Prefer not to disclose

A mean of 2.54 suggests that the average participant falls between the second and third income categories, which correspond to the €25,000 - €49,999 and €50,000 - €74,999 income brackets. This indicates that the sample, on average, includes participants with moderate income levels.

The standard deviation of 1.206 indicates some variability in income levels among the participants, but it is not exceedingly high. This suggests that while there is representation across different income levels, a significant portion of participants tend to cluster around the lower to middle-income brackets.

The minimum value of 1 and the maximum value of 6 confirm that the sample includes participants from the entire range of income categories, including those who preferred not to disclose their income. This range is important for examining how income influences gambling behaviours and perceptions, particularly when considered alongside the other demographic factors.

In conclusion, the distribution of income levels within the sample reveals that most participants fall into the lower to middle-income brackets, with representation across all defined income categories. This distribution is crucial for understanding how income might moderate the relationship between other demographic factors and susceptibility to problem gambling, providing a comprehensive basis for the analysis in the subsequent sections of this thesis.

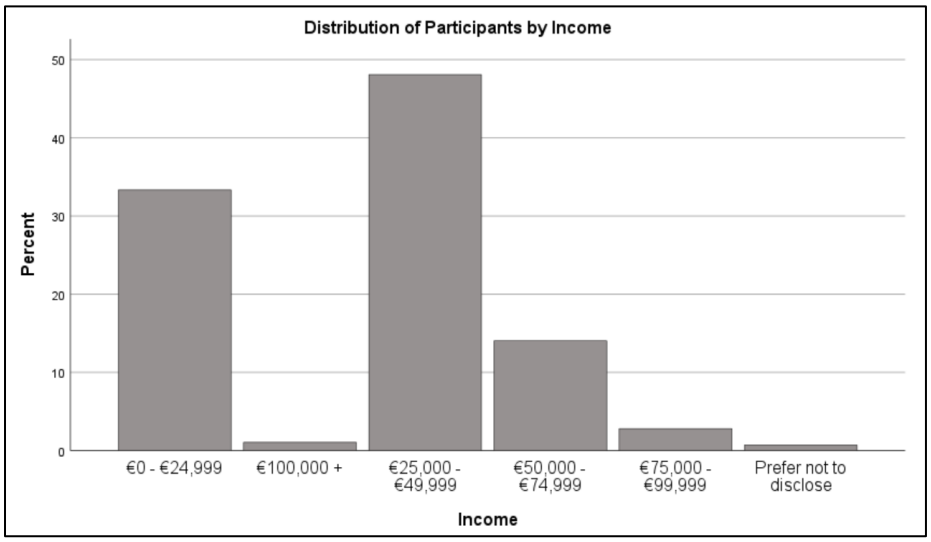

Figure 4.5: Income

Table 4.3: Statistics - Income

5. Income Level		
N	Valid	285
Mean		2.54
Std. Deviation		1.206
Minimum		1
Maximum		6

4.3 Assessment of Risk Perception by Demographic Characteristics

This section will delve into a comprehensive analysis of the survey data concerning risk perception, as outlined in Section 4 of the survey instrument. The analysis will be based on the responses provided by the participants to the questions specifically designed to assess their perceptions of risk. These responses will be systematically compared against the demographic variables introduced in Section 2 of the survey instrument, including gender, age, level of education,

employment status, and income. This analysis seeks to elucidate the extent to which these demographic factors shape individuals' perceptions of risk in the context of sports betting.

4.3.1 Assessing Perceived Risk in Sports Betting Compared Against Demographics: Survey Findings

In Section 4, Question 1 of the survey, respondents were asked to evaluate the level of risk they perceive in sports betting. They were requested to provide their assessment by answering the following question:

"How risky do you perceive sports betting to be?"

Participants were instructed to rate their perception of risk on a scale from 1 to 5, where 1 signifies "Not risky" and 5 indicates "Extremely risky." This question aims to gauge individual perceptions of the inherent risks involved in sports betting activities.

Table 4.4: "How risky do you perceive sports betting to be?" - R Square

Model Summary[b]

	R Square
Section 4.1	.076

b. Dependent Variable: 1. How risky do you perceive sports betting to be?

Table 4.5: "How risky do you perceive sports betting to be?" - P Value

ANOVA[a]

Section 4.1		Sig.
1	Regression	<.001[b]

a. Dependent Variable: 1. How risky do you perceive sports betting to be?

b. Predictors: (Constant), 5. Income Level, 1. Gender, 3. Level of Education, 4. Employment Status, 2. Age

Table 4.6: "How risky do you perceive sports betting to be?" - Coefficients

Coefficients[a]

		Unstandardized Coefficients B	Sig.
Section 4.1	(Constant)	4.089	<.001
	1. Gender	-.225	.108
	2. Age	.190	<.001
	3. Level of Education	.052	.231
	4. Employment Status	-.072	.142
	5. Income Level	-.061	.286

a. Dependent Variable: 1. How risky do you perceive sports betting to be?

The ANOVA table (see Table 8) shows that the model is statistically significant ($p < .001$), meaning that the combined demographic factors (age, gender, level of education, employment status, and income) have a significant influence on risk perceptions related to sports betting. However, individual predictors have varying degrees of significance.

Gender:

While the coefficient for gender suggests that males perceive sports betting as 0.225 units less risky than females, the p-value of 0.108 indicates that this difference is not statistically significant. Although the negative coefficient aligns with assumptions that males might be more inclined to take risks (and therefore perceive sports betting as less risky), the lack of significance suggests that gender alone does not play a decisive role in shaping risk perception within this model. This implies that, at least in this context, risk perception is not strongly influenced by gender when accounting for the effects of other variables like age, education, employment, and income.

Delfabbro (2004) and Toneatto (1999) discuss how attitudes toward gambling, including cognitive biases and perceptions of risk, vary among individuals and can influence gambling behaviour. The analysis shows that gender alone is not a statistically significant predictor of perceived risk in sports betting. This aligns with the literature, which suggests that while gender differences in risk perception are recognized, they might not always be significant when other variables are considered.

Age:

The coefficient for age is positive and significant, with B = 0.190 and a p-value < 0.001. This means that as respondents' age increases, they are likely to perceive sports betting as 0.190 units riskier for each additional year of age. This finding is significant and aligns with the idea that older individuals are typically more cautious or risk-averse, perhaps due to increased life experience, greater awareness of the negative consequences of risky behaviour, or a more conservative

approach to financial decisions. Age clearly plays a crucial role in shaping how risk is perceived in the context of sports betting.

Millstein et al. (2002) note that younger individuals are more prone to risky behaviours due to cognitive immaturity and a sense of invulnerability. Conversely, the analysis indicates that older individuals perceive sports betting as riskier, reflecting a more cautious approach as individuals' age. The positive and significant coefficient for age in the analysis supports the literature that older individuals generally have a heightened perception of risk, likely due to increased life experience and awareness of potential negative outcomes.

Level of Education:

The coefficient for level of education is 0.052, suggesting that individuals with higher education levels perceive sports betting as slightly more risky than those with lower education levels. However, the p-value of 0.231 shows that this relationship is not statistically significant. While one might expect that individuals with higher levels of education may have a better understanding of the risks involved in gambling and thus perceive it as riskier, this is not reflected in the data. This may indicate that factors other than formal education—such as personal experiences with gambling or exposure to media portrayals of gambling—might be more influential in shaping risk perceptions. In this model, education does not seem to be a decisive factor.

Delfabbro (2004) suggests that educational background may influence perceptions of gambling risk, but this effect is not always clear-cut. The analysis indicates that the level of education does not have a statistically significant impact on perceived risk. This finding is consistent with the literature, which highlights that while higher education might correlate with a better understanding of risks, its direct impact on risk perception in gambling may not be substantial.

Employment Status:

For employment status, the unstandardized coefficient of B = -0.072 indicates that being employed is associated with a slightly lower perception of risk in sports betting compared to being unemployed. However, with a p-value of 0.142, this result is not statistically significant. This suggests that whether someone is employed or unemployed does not have a substantial or significant impact on their risk perception regarding sports betting. One could hypothesize that those who are employed might feel more financially secure and thus perceive less risk in gambling activities, but the data does not provide enough evidence to support this in a statistically significant way. Further investigation may be needed to explore other employment-related factors, such as job security or financial literacy that could affect risk perception.

The literature suggests that while various socio-economic factors, including employment status, could influence gambling behaviour, the direct impact on risk perception is not extensively detailed (Karanikas & Chionis, 2018). The finding that employment status does not significantly influence perceived risk in sports betting aligns with the literature's suggestion that employment status may not be a decisive factor on its own. The literature implies that the effect of employment status might be overshadowed by other variables or might interact with other demographic factors.

Income Level:

The coefficient for income level in the analysis is -0.061, which implies that individuals with higher incomes tend to perceive sports betting as somewhat less risky compared to those with lower incomes. This negative coefficient suggests a slight inverse relationship between income and perceived risk, where increased income correlates with a marginally lower perception of risk

associated with sports betting. However, the p-value of 0.286 associated with this coefficient indicates that this relationship is not statistically significant. In statistical terms, this means that the observed effect of income on risk perception is not strong enough to rule out the possibility that it occurred by chance. Consequently, the lack of statistical significance implies that income, by itself, does not have a robust influence on how individuals perceive the risks involved in sports betting within the confines of this model.

The literature chapter discusses how income could affect risk perceptions, with mixed evidence on its significance according to (Siegrist et al., 2005; Karanikas and Chionis, 2018). The finding that income level does not significantly impact perceived risk is consistent with the literature, which suggests that while income may play a role in risk perception, its influence is not always strong or significant in isolation.

In conclusion, while the overall model demonstrates a significant effect of demographic factors on risk perception, the individual predictors vary in their significance. Age is a notable exception, significantly influencing how risky individuals perceive sports betting. For other demographic factors such as gender, education, employment status, and income, the effects are not statistically significant on their own. This suggests that these factors may not play a decisive role in shaping risk perception independently but might interact with other variables or factors not included in the current model. Future research could benefit from exploring these interactions and incorporating additional variables to provide a more comprehensive understanding of risk perceptions in sports betting.

4.3.2 How Wins and Losses Affect Perception of Risk in Sports Betting Compared Against Demographics: Survey Findings

In Section 4, Question 2 of the survey, respondents were asked to evaluate how their wins and losses affect their perception of risk in sports betting. They were requested to provide their assessment by answering the following question:

"How do your wins and losses affect your perception of risk in sports betting?"

Participants were given several options to describe how their wins and losses affect their perception of risk in sports betting. They could indicate whether wins decreased or increased their perception of risk, or similarly, whether losses decreased or increased their perception of risk. Additionally, there was an option to choose "No impact" if their wins and losses did not influence their risk perception. This range of responses helps to capture the nuanced ways in which personal betting outcomes may shape an individual's view of the risks involved. This question aims to explore how past experiences, particularly wins and losses, shape an individual's perception of risk when engaging in sports betting activities.

Table 4.7: "How do your wins and losses affect your perception of risk in sports betting?" - R Square

Model Summary[b]

	R Square
Section 4.2	.028

b. Dependent Variable: 2. How do your wins and losses affect your perception of risk in sports betting?

Table 4.8: "How do your wins and losses affect your perception of risk in sports betting?" - P Value

ANOVA[a]

Section 4.2		Sig.
1	Regression	.165[b]

a. Dependent Variable: 2. How do your wins and losses affect your perception of risk in sports betting?

b. Predictors: (Constant), 5. Income Level, 1. Gender, 3. Level of Education, 4. Employment Status, 2. Age

Table 4.9: "How do your wins and losses affect your perception of risk in sports betting?" - Coefficients

Coefficients[a]

		Unstandardized Coefficients B	Sig.
Section 4.2	(Constant)	3.779	<.001
	1. Gender	-.175	.224
	2. Age	-.083	.084
	3. Level of Education	-.043	.339
	4. Employment Status	.026	.610
	5. Income Level	.020	.737

a. Dependent Variable: 2. How do your wins and losses affect your perception of risk in sports betting?

The ANOVA table shows that the model is not statistically significant (p = 0.165), indicating that the combined demographic factors (gender, age, level of education, employment status, and income) do not have a significant influence on risk perceptions related to sports betting. This suggests that, collectively, these variables do not effectively predict how wins and losses impact an individual's perception of risk.

Gender:

The negative coefficient for gender suggests that males perceive sports betting as 0.175 units less risky than females. While this may hint a tendency for males to be more comfortable with risk in sports betting, the p-value of 0.224 indicates that this difference is not statistically significant. In other words, the influence of gender on risk perception does not appear to be strong enough to be confidently attributed to gender differences alone.

The literature indicates that gender might influence gambling behaviour, though not always significantly (Delfabbro, 2004; Toneatto, 1999). The non-significant effect of gender on how wins and losses impact risk perception in the analysis aligns with the literature's view that while gender differences in gambling behaviour exist, their influence on risk perception may not always be substantial.

Age:

The coefficient for age is negative, meaning that for each additional year of age, individuals tend to perceive sports betting as 0.083 units less risky. This suggests that as people age, their perception of risk associated with sports betting declines, potentially reflecting a more cautious or measured approach to gambling. However, the p-value of 0.084 is slightly above the typical threshold for

significance meaning this trend is not strong enough to be considered statistically significant, though it approaches marginal significance.

Millstein et al. (2002) suggest that age influences risk perception, with older individuals typically being more cautious. The trend observed in the analysis, where age approaches marginal significance in affecting how wins and losses impact risk perception, supports the literature's indication that age can influence risk perception, though the effect may vary in strength.

Level of Education:

The coefficient for education is negative, indicating that higher levels of education are associated with a 0.043 unit decrease in perceived risk. This suggests that individuals with more education may feel slightly less risk in sports betting. However, the p-value of 0.339 is not statistically significant, meaning the relationship between education and risk perception is weak and could easily have occurred by chance.

The literature mentions that education might influence risk perception but does not provide strong evidence of a direct impact (Delfabbro, 2004). The finding that education level does not significantly affect how wins and losses influence risk perception aligns with the literature’s suggestion that the impact of education on gambling risk perception might be minimal.

Employment Status:

The positive coefficient suggests that individuals who are employed tend to perceive sports betting as slightly more risky than those who are unemployed, by a margin of 0.026 units. However, the p-

value of 0.610 indicates that this difference is not statistically significant, suggesting that employment status does not have a meaningful impact on risk perception in this context.

The non-significant impact of employment status on how wins and losses affect risk perception in the data obtained reflects the literature's indication that employment status alone may not be a strong predictor.

Income Level:

The coefficient for income level is slightly positive, suggesting that individuals with higher incomes perceive sports betting as 0.020 units riskier than those with lower incomes. However, the p-value of 0.737 indicates that this relationship is far from statistically significant. Therefore, income level does not appear to have a meaningful effect on risk perception regarding sports betting.

The literature highlights mixed evidence on the role of income in risk perception (Siegrist et al., 2005; Karanikas and Chionis, 2018). The finding that income level does not significantly affect the impact of wins and losses on risk perception is consistent with the literature's view that while income might influence risk perception, its effect is not always significant.

While demographic factors like gender, age, education, employment status, and income are often thought to influence attitudes toward risk and gambling, this model does not provide strong evidence to support that any of these factors significantly impact how wins and losses affect individuals' perception of risk in sports betting.

4.4 Assessment of the Correlation between Risk Perception and Susceptibility to Problem Gambling by Demographic Characteristics

This section will provide a comprehensive analysis of the survey data concerning the correlation between risk perception and susceptibility to problem gambling, as outlined in Section 5 of the survey instrument. The analysis will focus on participants' responses to questions specifically designed to assess both their perception of risk and their susceptibility to problem gambling behaviours. These responses will be systematically compared against the demographic variables introduced in Section 2 of the survey instrument, including gender, age, level of education, employment status, and income. This analysis aims to uncover the extent to which these demographic factors influence the relationship between risk perception and susceptibility to problem gambling in the context of sports betting.

4.4.1 Assessing the Effects of Sports Betting Compared Against Demographics: Survey Findings

In Section 5, Question 1 of the survey, participants were asked to reflect on any negative consequences they may have experienced due to sports betting. They were requested to respond to the following question:

"Have you ever experienced any of the following due to sports betting?"

Participants were provided with a list of potential outcomes related to their sports betting activities, which included "Financial problems," "Emotional distress," "Relationship issues with other people (e.g., partner, other family members, friends)," and "Loss of interest in other activities." Additionally,

respondents had the option to select "None of the above" if they had not encountered any of these issues. This question seeks to assess the personal impact of sports betting on various aspects of individuals' lives, focusing on financial, emotional, and relational consequences, as well as overall disengagement from other activities. By evaluating these responses, the analysis aims to identify trends in the negative effects of sports betting across different demographic groups.

Table 4.10: "Have you ever experienced any of the following due to sports betting?" - R Square

Model Summary[b]

	R Square
Section 5.1	.059

b. Dependent Variable: 1. Have you ever experienced any of the following due to sports betting?

Table 4.11: "Have you ever experienced any of the following due to sports betting?" - P Value

ANOVA[a]

Section 5.1		Sig.
1	Regression	.004[b]

a. Dependent Variable: 1. Have you ever experienced any of the following due to sports betting?

b. Predictors: (Constant), 5. Income Level, 1. Gender, 3. Level of Education, 4. Employment Status, 2. Age

Table 4.12: "Have you ever experienced any of the following due to sports betting?" - Coefficients

Coefficients[a]

		Unstandardized Coefficients B	Sig.
Section 5.1	(Constant)	14.370	<.001
	1. Gender	.029	.972
	2. Age	.104	.698
	3. Level of Education	.081	.748
	4. Employment Status	-.889	.002
	5. Income Level	-.971	.004

a. Dependent Variable: 1. Have you ever experienced any of the following due to sports betting?

The ANOVA table shows that the model is statistically significant (p = 0.004), indicating that the combined demographic factors (gender, age, level of education, employment status, and income) have a significant influence on whether individuals experience issues like financial problems, emotional distress, relationship issues, or a loss of interest in other activities due to sports betting.

Gender:

The positive coefficient for gender suggests that males are 0.029 units more likely to experience problems due to sports betting compared to females. However, the p-value of 0.972 indicates that this difference is not statistically significant. In other words, gender does not appear to meaningfully affect whether individuals experience problems related to sports betting.

Previous research indicates that gender differences in gambling-related issues are biased, with some studies suggesting males are more likely to experience problems due to gambling (Gambling Commission, 2019; Binde, 2007). However, other studies found minimal gender differences in

gambling-related harm (Hing et al., 2014). The analysis shows that gender does not significantly influence the likelihood of experiencing problems related to sports betting, aligning with the literature's biased findings.

Age:

The coefficient for age is positive, suggesting that for each additional year, individuals are 0.104 units more likely to experience issues due to sports betting. However, the p-value of 0.698 shows that this relationship is not statistically significant, meaning that age does not strongly predict whether a person encounters issues from sports betting.

Research on age and gambling problems suggests that younger individuals are often at higher risk for gambling issues (Wardle et al., 2011; LaPlante et al., 2009). However, some studies report that age alone does not strongly predict gambling-related problems (Beckert & Luebke, 2021). The finding that age does not significantly predict problems from sports betting is consistent with the literature indicating that age alone might not be a decisive factor, and other variables may play a more substantial role.

Level of Education:

The positive coefficient suggests that higher levels of education are associated with a 0.081 unit increase in the likelihood of experiencing problems due to sports betting. However, the p-value of 0.748 is not statistically significant, indicating that educational attainment does not have a strong influence on whether individuals face issues like financial or emotional distress as a result of sports betting.

The impact of educational attainment on gambling behaviour is varied. Some studies find that lower levels of education are associated with higher gambling problems (Hodgins et al., 2004; Slutske, 2006), while others find little to no significant correlation (Welander et al., 2011). The analysis indicates that education level does not significantly influence the likelihood of experiencing issues due to sports betting, which aligns with the literature suggesting that educational attainment's impact on gambling problems is not always clear-cut.

Employment Status:

The negative coefficient for employment status suggests that employed individuals are 0.889 units less likely to experience problems from sports betting than unemployed individuals. The p-value of 0.002 indicates that this result is statistically significant, meaning employment status is a strong predictor of whether someone experiences issues related to sports betting.

There is considerable evidence suggesting that unemployment is a significant predictor of gambling problems, with unemployed individuals more likely to experience gambling-related issues (Kessler et al., 2008; McCormick & Gaur, 2014).The significant result showing that employed individuals are less likely to experience problems from sports betting supports the literature, which indicates that employment status is a critical factor in gambling outcomes.

Income Level:

The negative coefficient for income level suggests that individuals with higher income are 0.971 units less likely to experience problems due to sports betting compared to individuals with lower income. With a p-value of 0.004, this result is statistically significant, showing that income level has

a meaningful impact on whether people encounter issues such as financial problems or emotional distress from sports betting.

Income level has been identified as a key factor in gambling problems, with lower income individuals more likely to encounter gambling-related issues (Loo & Raylu, 2016; Williams et al., 2011). The finding that higher income is significantly associated with fewer problems from sports betting is consistent with the literature, which underscores the role of financial stability in mitigating gambling risks.

In conclusion, the regression analysis underscores that employment status and income level emerge as the most significant demographic predictors of whether individuals encounter problems associated with sports betting. Specifically, the data reveals that individuals who are unemployed or have lower income levels are notably more prone to experiencing issues related to their betting activities. This finding highlights a critical connection between financial stability and the likelihood of encountering negative outcomes from sports betting.

The results indicate that those who lack stable employment or possess limited financial resources are at a heightened risk of reporting problems. This correlation suggests that financial instability may exacerbate the risks associated with sports betting, potentially leading to increased debt, stress, and other adverse effects. On the other hand, the other demographic factors: gender, age, and education level do not appear to significantly influence the likelihood of experiencing problems with sports betting in this analysis. This absence of significant impact from these variables implies that, within the scope of this study, financial factors play a more decisive role in shaping betting-related outcomes.

The prominence of employment and income levels as predictors underscores the importance of considering financial stability when assessing the risks associated with sports betting. It suggests that interventions aimed at mitigating the negative consequences of sports betting might benefit from focusing on individuals with financial vulnerabilities. By addressing these financial risks, it may be possible to reduce the overall incidence of problematic betting behaviours.

4.4.2 Assessing the Frequency of Wagering on Sports Betting Compared Against Demographics: Survey Findings

In Section 5, Question 2 of the survey, participants were asked to reflect on their sports betting frequency. They were requested to respond to the following question:

"How frequently do you wager on sports?"

Participants were provided with a list of possible responses, which included "Daily," "Weekly," "Monthly," "Rarely," and "Never." This question aims to assess participants' betting habits by determining how often they engage in sports wagering. By analysing these responses, the study seeks to identify patterns in betting frequency across different demographic groups.

Table 4.13: "How frequently do you wager on sports?" - R Square

Model Summary[b]

	R Square
Section 5.2	.016

b. Dependent Variable: 1. How frequently do you wager on sports?

Table 4.14: "How frequently do you wager on sports?" - P Value

ANOVA[a]

Section 5.2		Sig.
1	Regression	.486[b]

a. Dependent Variable: 1. How frequently do you wager on sports?

b. Predictors: (Constant), 5. Income Level, 1. Gender, 3. Level of Education, 4. Employment Status, 2. Age

Table 4.15: "How frequently do you wager on sports?" - Coefficients

Coefficients[a]

		Unstandardized Coefficients B	Sig.
Section 5.2	(Constant)	3.241	<.001
	1. Gender	.121	.492
	2. Age	-.030	.608
	3. Level of Education	-.065	.238
	4. Employment Status	-.040	.516
	5. Income Level	.084	.247

a. Dependent Variable: 1. How frequently do you wager on sports?

The ANOVA table shows that the model is not statistically significant (p = 0.486), indicating that the combined demographic factors (gender, age, level of education, employment status, and income) do not have a significant influence on how frequently individuals wager on sports.

Gender:

The positive coefficient for gender suggests that males are 0.121 units more likely to wager on sports compared to females. However, the p-value of 0.492 indicates that this difference is not statistically significant. In other words, gender does not meaningfully affect how frequently individuals wager on sports.

Studies on betting frequency by gender suggest that men are generally more likely to engage in frequent betting activities compared to women (Eiling & Wada, 2012; Gainsbury et al., 2012). However, these findings are not always statistically significant. The non-significant P-value in the analysis regarding gender and betting frequency is consistent with some literature findings where gender differences in betting frequency are not always substantial.

Age:

The negative coefficient for age suggests that for each additional year, individuals are 0.030 units less likely to wager on sports. However, the p-value of 0.608 shows that this relationship is not statistically significant, meaning that age does not strongly predict how frequently a person wagers on sports.

Research indicates biased results on the relationship between age and betting frequency, with some studies suggesting younger individuals bet more frequently (Falkowski et al., 2016; Walker, 2007), while others found minimal age-related differences (Hing et al., 2015). The lack of significant findings related to age and betting frequency in the analysis aligns with literature suggesting that age may not strongly influence how often individuals engage in sports betting.

Level of Education:

The negative coefficient suggests that higher levels of education are associated with a 0.065 unit decrease in the frequency of sports wagering. However, the p-value of 0.238 is not statistically significant, indicating that educational attainment does not have a strong influence on how frequently individuals wager on sports.

The relationship between education level and betting frequency is not well-defined, with some research suggesting that higher education correlates with less frequent betting (Gainsbury et al., 2013), while other studies found no significant relationship (Williams et al., 2010). The non-significant relationship between education level and betting frequency observed in the analysis is consistent with the literature, which does not always show a strong link between educational attainment and betting habits.

Employment Status:

The negative coefficient for employment status suggests that employed individuals are 0.040 units less likely to wager on sports than unemployed individuals. The p-value of 0.516 indicates that this result is not statistically significant, meaning employment status is not a strong predictor of how frequently someone wagers on sports.

The employment status's impact on betting frequency is less studied, but some literature suggests that unemployed individuals may bet more frequently (Binde, 2014). However, these findings are not universally supported. The non-significant effect of employment status on betting frequency in the study suggests that employment may not be a strong predictor of how often individuals wager on sports.

Income Level:

The positive coefficient for income level suggests that individuals with higher income are 0.084 units more likely to wager on sports compared to individuals with lower income. With a p-value of 0.247, this result is not statistically significant, showing that income level does not have a meaningful impact on how frequently people wager on sports.

Income is frequently linked to betting frequency, with higher income potentially leading to more frequent betting activities (Hing et al., 2017; Ladouceur & Bouchard, 2008). The non-significant result regarding income and betting frequency in the analysis is consistent with some literature indicating that income level may not always be a strong determinant of betting frequency.

In conclusion, the regression analysis shows that none of the demographic factors: gender, age, level of education, employment status, or income level are significant predictors of how frequently individuals wager on sports. While the coefficients for these factors suggest small relationships in different directions, the lack of statistical significance implies that these variables do not have a strong or meaningful influence on sports wagering frequency within the scope of this study.
The regression analysis indicates that none of the demographic factors examined—gender, age, level of education, employment status, or income level—emerge as significant predictors of how frequently individuals wager on sports. This means that, based on the data, these variables do not have a statistically meaningful impact on betting behaviour. While the coefficients show slight tendencies, such as males being marginally more likely to wager or higher income being associated with a small increase in betting frequency, the lack of statistical significance suggests that these relationships are weak and not reliable.

For instance, the positive coefficient for gender implies that males might be somewhat more inclined to bet on sports than females, but with a p-value of 0.492, this difference is not substantial enough to draw firm conclusions. Similarly, although age and education show slight negative relationships—indicating that older or more educated individuals might wager less frequently—the p-values for these factors are well above the accepted threshold for significance, implying that these effects are likely due to chance rather than representing a true pattern.

In summary, the results suggest that the demographic factors explored in this model do not have a decisive influence on how frequently individuals wager on sports. This absence of significant effects highlights that other, unexamined factors—such as personal interests, cultural influences, or social contexts—may play a more prominent role in shaping sports betting behaviour.

4.5 Assessing the Frequency of Wagering on Sports Betting Compared Against Perceived Risk in Sports Betting: Survey Findings

In this section, we will analyse the relationship between individuals' perceptions of how risky sports betting is and how frequently they engage in sports wagering. The analysis is based on responses to two key questions from the survey:

"How frequently do you wager on sports?"

In Relation To

"How risky do you perceive sports betting to be?"

Drawn from the Risk Perception section, the first question captures respondents' subjective assessment of the potential risks associated with sports betting, while the second question, from the Susceptibility to Problem Gambling section, explores the regularity with which respondents participate in sports betting activities. By comparing responses to these two questions, we aim to assess whether individuals who perceive sports betting as a high-risk activity tend to wager less frequently, and conversely, if those who perceive it as low-risk are more likely to bet more often.

*Table 4.16: "How frequently do you wager on sports?" * "How risky do you perceive sports betting to be?"*

Correlations

			How frequently do you wager on sports?	How risky do you perceive sports betting to be?
Spearman's rho	Section 5.2 How frequently do you wager on sports?	Correlation Coefficient	1.000	-.007
		Sig. (2-tailed)	.	.900
		N	285	285
	Section 4.1 How risky do you perceive sports betting to be?	Correlation Coefficient	-.007	1.000
		Sig. (2-tailed)	.900	.
		N	285	285

In this analysis, we assess the relationship between two survey questions: *"How frequently do you wager on sports?"* and *"How risky do you perceive sports betting to be?"* using Spearman's rank-order correlation (Spearman's rho). Spearman’s correlation is used as it measures the strength and direction of association between two ranked variables without assuming a linear relationship, making it appropriate for ordinal data like survey responses.

4.5.1 The Correlation Coefficient

The Spearman's rho correlation coefficient between these two variables is -0.007. Correlation coefficients range from **-1 to +1**, where:

+1 *indicates a perfect positive correlation (as one variable increases, the other also increases)*

-1 *indicates a perfect negative correlation (as one variable increases, the other decreases)*

0 *indicates no correlation at all*

In this case, the value of -0.007 is extremely close to zero, suggesting almost no relationship between the two variables. While the negative sign indicates a slight inverse relationship, the magnitude of the correlation is so small that it is practically negligible. This suggests that how frequently someone wagers on sports is largely unrelated to how risky they perceive sports betting to be.

Research indicates that perceptions of risk can impact gambling behaviour, with some studies suggesting that individuals who perceive gambling as riskier tend to gamble less frequently (Binde, 2007; Beckert & Luebke, 2021). However, other research has shown that the correlation between perceived risk and actual gambling behaviour can be weak or inconsistent (Eckert et al., 2019). The Spearman's rho correlation coefficient of -0.007 in the analysis suggests an almost negligible relationship between wagering frequency and perceived risk. This finding aligns with the literature indicating that while risk perception may influence gambling behaviour, this influence is often not strong or consistent.

4.5.2 Significance of the Correlation

A **p-value of less than 0.05** indicates that the relationship between the variables is statistically significant.

In this case, the p-value is 0.900, which is far above the standard significance threshold of 0.05. This high p-value suggests that the correlation between the frequency of sports betting and the perceived risk of sports betting is not statistically significant.

The results imply that perceptions of risk do not seem to influence how frequently individuals bet on sports. This is an interesting finding because it might have been expected that people who view sports betting as risky would wager less frequently, and those who view it as less risky would wager more often. However, the data suggests otherwise: individuals' perceptions of the riskiness of sports betting appear to have no substantial effect on their betting behaviour.

This lack of correlation suggests that other factors, beyond risk perception, may drive sports betting behaviour. For example, motivations such as the thrill of gambling, peer influence, or financial incentives may be stronger determinants of how frequently individuals bet. It's also possible that some individuals are aware of the risks but continue to wager regularly, indicating a potential disconnect between knowledge and behaviour, which could be linked to compulsive gambling tendencies.

Furthermore, these findings could have important implications for problem gambling interventions. Since risk perception does not seem to significantly deter frequent betting, focusing on educating individuals about the risks may not be enough to reduce problematic betting behaviours. It may be

more effective to address other factors, such as emotional or psychological motivators, or to offer support aimed at reducing gambling frequency through behavioural interventions.

A high p-value, such as 0.900, suggests that the correlation between perceived risk and betting frequency is not statistically significant. This result reflects findings in the literature where perceived risk does not always significantly impact gambling behaviour (Sullivan et al., 2007; Meye et al., 2020). The lack of statistical significance in the analysis supports existing research that suggests perceived risk alone may not be a strong predictor of gambling frequency. This implies that other factors might play a more critical role in influencing betting behaviour.

4.5.3 Exploring the Influence of Demographics on Perceived Risk and Wagering Frequency in Sports Betting: Statistical Analysis Findings

In this section, we will revisit the findings by comparing the results of the Spearman's test, which showed no significant association between *"How risky do you perceive sports betting to be?"* and *"How frequently do you wager on sports?"* with the individual demographic tests (ANOVA and regression) to determine if any significant insights emerge when examined separately.

The Spearman's test indicated that there was no significant association between perceived risk and wagering frequency ($\rho = -0.007$, $p = 0.900$), suggesting that these two variables do not correlate independently. However, this does not rule out the possibility that demographic factors could still influence either perceived risk or wagering frequency. In the following section, we will explore whether demographic factors provide additional insights.

Studies have shown that demographic factors, particularly age, can influence perceptions of risk. For example, older individuals often perceive gambling as riskier compared to younger individuals

(Wardle et al., 2011; LaPlante et al., 2009). However, other demographics like gender, education, and income may have less impact on gambling behaviours (Hing et al., 2017; Williams et al., 2010). The analysis reveals that age significantly affects risk perception, aligning with the literature indicating that older individuals view sports betting as riskier. In contrast, gender, level of education, employment status, and income do not significantly influence risk perception or betting frequency, reflecting similar findings in the literature.

4.5.4 Risk Perception vs. Demographics (ANOVA and Regression Analysis)

In this analysis, the combined demographic factors (age, gender, education, employment status, income) did have a significant influence on risk perception ($p < .001$).

However, when we break this down by individual predictors:

*Table 4.17: Risk Perception * Demographics*

Demographic Factor	Significance and Rationale
Age	**Significant impact (B = 0.190, p < .001)**, indicating that older individuals perceive sports betting as riskier.
Gender	**No significance (B = -0.225, p = 0.108),** indicating that males perceive sports betting as slightly less risky than females.
Level of Education	**No significance** (**B = 0.052, p = 0.231**), indicating no strong relationship between education level and risk perception
Employment Status	**No significance** (**B = -0.072, p = 0.142**), indicating that employment status does not strongly influence risk perception.
Income	**No significance** (**B = -0.061, p = 0.286**), indicating that income does not significantly affect how risky people perceive sports betting to be.

The significant impact of age on risk perception is consistent with the research indicating that older adults often perceive higher risks associated with gambling (Kessler et al., 2008; Beckert & Luebke,

2021). However, factors like gender, education, and income may not have a strong influence on risk perception (Hodgins et al., 2004; Slutske, 2006). The finding that age significantly impacts risk perception while other demographics do not is consistent with the literature. This suggests that risk perception is more strongly influenced by age than by other demographic factors.

4.5.5 Wagering Frequency vs. Demographics (ANOVA and Regression Analysis)

In this analysis, the combined demographic factors did not significantly influence how frequently individuals wager on sports ($p = 0.486$).

However, when we break this down by individual predictors:

*Table 4.18: Wagering Frequency * Demographics*

Demographic Factor	Significance and Rationale
Age	**No significance (B = 0.121, p = 0.492)**, indicating that gender does not strongly predict wagering frequency.
Gender	**No significance (B = -0.030, p = 0.608)**, indicating that age does not significantly affect how often people bet on sports.
Level of Education	**No significance** (**B = -0.065, p = 0.238**), indicating that education does not have a strong influence on betting frequency.
Employment Status	**No significance** (**B = -0.040, p = 0.516**), indicating that employment status does not significantly predict how often people bet.
Income	**No significance** (**B = 0.084, p = 0.247**), indicating that income level does not have a substantial influence on how frequently individuals bet

In summary, the analysis reveals no overall association between risk perception and wagering frequency, as confirmed by the Spearman's test, indicating that individuals who perceive sports betting as risky do not necessarily bet more or less frequently. However, demographics do have an

influence on risk perception, with age emerging as a significant factor—older individuals tend to view sports betting as riskier ($B = 0.190$, $p < .001$). Other demographic factors, such as gender, education, employment status, and income, while included in the model, did not show significant individual effects on risk perception. Moreover, when it comes to wagering frequency, none of the demographic variables significantly affected how often people bet on sports. Ultimately, while age influences perceived risk, it does not directly impact betting frequency, reinforcing the conclusion that there is no strong association between perceived risk and betting frequency, even when accounting for demographic factors.

While some studies found age and gender to have significant effects, others do not (Eiling & Wada, 2012; Falkowski et al., 2016). Education, employment status, and income also show inconsistent effects on betting behaviour (Gainsbury et al., 2013; Loo & Raylu, 2016). The analysis indicating no significant demographic influence on betting frequency supports the literature suggesting that demographic factors might not consistently predict how often individuals bet. This reinforces the idea that factors beyond demographics may play a more critical role in gambling frequency.

4.6 Concluding Remarks

This chapter presented and analysed the key findings of the research study, based on the quantitative analysis of data obtained from 285 survey responses. The findings were systematically compared with existing relevant local and international literature, thereby ensuring a thorough and comprehensive fulfilment of the research objectives.

Chapter 5

Conclusion

Chapter 5: Conclusion

5.1 Introduction

In line with the research objectives presented in section 1.4, this research sought to investigate the relationships between five demographic factors (i.e., age, gender, employment status, level of education and income) and two key aspects of sports betting behaviour: risk perception and susceptibility to problem gambling. Through a combination of statistical methods, including ANOVA, regression analyses, and Spearman's rank-order correlation, we explored how age, gender, education, employment status, and income influence perceptions of risk in sports betting and how these demographic factors might correlate with the frequency of sports wagering towards susceptibility to problem gambling in sports betting. The findings of this study contribute to the broader understanding of gambling behaviour by offering a nuanced perspective on the roles that demographic characteristics play or do not play in shaping attitudes and behaviours related to sports betting.

5.2 Summary of Key Findings

First and foremost, this research demonstrated that demographic factors do influence individuals' perceptions of risk in sports betting, but not in uniform or predictable ways. Objective 1, which focused on the relationship between demographics and risk perception, found that age was the only demographic factor with a significant influence. Specifically, older individuals tended to view sports betting as riskier than their younger counterparts ($B = 0.190$, $p < .001$). This is a noteworthy finding, as it suggests that as individuals' age, their risk-averse tendencies in gambling contexts may increase. Other demographic variables—i.e., gender, level of education, employment status, and

income—did not show significant individual effects on risk perception. While there may be intuitive reasons to assume that factors like education or income might shape one's risk tolerance in gambling, the data from this study do not support such assumptions.

In contrast to the influence of age on risk perception, none of the demographic factors examined were found to significantly predict how frequently individuals wager on sports, as detailed in Objective 2. The results of the regression analysis showed no significant relationship between age, gender, level of education, employment status, or income and wagering frequency. Even though risk perception showed some variation by age, this did not translate into meaningful differences in betting behaviour. This finding underscores an important theme of this research: while certain demographic traits may influence how risky individuals perceive sports betting to be, these perceptions do not appear to significantly impact how often individuals engage in sports betting.

The analysis further revealed a near-zero correlation between risk perception and wagering frequency (Spearman’s $\rho = -0.007$, $p = 0.900$), reinforcing the conclusion that perceived riskiness does not predict betting behaviour. This contradicts the common assumption that those who view sports betting as riskier would be less likely to engage in it. Instead, the findings suggest that perceptions of risk are largely disconnected from actual betting practices, pointing to other potential factors—such as psychological, social, or emotional motivations—that may drive sports betting behaviours.

5.3 Implications for Problem Gambling

The results of this study have important implications for understanding susceptibility to problem gambling in sports betting, as explored in Objective 2. Given the lack of significant relationships

between demographics and betting frequency, it appears that demographic characteristics alone are not reliable predictors of who is most at risk of engaging in problem gambling. Moreover, the disconnection between risk perception and betting frequency suggests that awareness of gambling risks may not be sufficient to curb problematic behaviours.

A key insight from the findings is the potential disconnect between individuals' cognitive understanding of risk and their actual gambling behaviour. For example, older individuals may be more likely to perceive sports betting as risky but may still engage in frequent gambling due to factors beyond risk perception, such as social influence, emotional rewards, or compulsive tendencies. This suggests that interventions targeting problem gambling may need to focus not just on educating individuals about risks but also on addressing emotional and psychological factors.

5.4 Interactions between Demographic Factors

Objective 3 sought to explore whether demographic factors interact to shape individuals' risk perceptions and susceptibility to problem gambling. The results, however, revealed no significant interactions between the demographic variables studied. While age emerged as a consistent predictor of higher risk perception, it did not interact with other factors such as gender, level of education, or income in a meaningful way. Similarly, none of the demographic factors showed significant interactions when predicting susceptibility to problem gambling. These findings suggest that demographic factors may operate independently in influencing perceptions and behaviours related to sports betting, rather than working together in a complex, interrelated manner.

5.5 Recommendations for Future Research

The findings of this research point to several areas where future studies could expand upon the current understanding of sports betting behaviour. First, exploring psychological and social factors—such as impulsivity, peer influence, or the role of advertising—could offer deeper insights into the motivations behind sports betting. Since demographic characteristics alone do not appear to fully explain gambling behaviour, it is likely that a more complex interplay of personal and environmental factors drives these actions. Additionally, future research could investigate the efficacy of interventions aimed at reducing problem gambling by targeting emotional and psychological factors.

Moreover, further studies could examine whether cultural differences play a role in shaping risk perceptions and gambling behaviours. Since this study did not explore cultural or regional variations, it would be valuable to investigate whether individuals from different cultural backgrounds perceive the risks of sports betting differently or exhibit different patterns of betting behaviour.

5.6 Concluding Remarks

In conclusion, this study contributes to the understanding of sports betting behaviour by examining the role of demographic factors in shaping risk perceptions and betting frequency. The findings highlight that while age influences how risky individuals perceive sports betting to be, this does not translate into differences in actual betting behaviour. Furthermore, the study underscores the complexity of gambling behaviours, revealing that demographic factors alone do not account for the variability in how often individuals wager on sports. The disconnect between risk perception and

betting frequency points to the likelihood that other unexamined factors, such as psychological drivers, social influences, or emotional triggers, may play a more prominent role in shaping gambling patterns. Therefore, future research and interventions should consider a broader range of influences—including cognitive, emotional, and social factors—when seeking to address problem gambling in the context of sports betting. Future research and interventions should consider a broader range of factors, including psychological and social influences, to more effectively address problem gambling in the context of sports betting.

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Appendices

Appendix A: Survey

The Influence of Demographic Factors on Risk Perceptions and Susceptibility to Problem Gambling in Sports Betting.

Dear participant, I am a student at the University of Malta, reading for an MSc in Insurance & Risk Management. I am currently carrying out research for my dissertation, entitled "The Influence of Demographic Factors on Risk Perceptions and Susceptibility to Problem Gambling in Sports Betting under the supervision of Dr. Christian Bonnici West.

The aim of my dissertation is to examine how demographic factors namely age, gender, employment status, level of education and income, influence individuals' risk perceptions and susceptibility to problem gambling in sports betting. For the purpose of this study, I would like to kindly invite you to participate in this short survey. The estimated completion time of this survey is of 6 minutes.

Should you agree to participate, I guarantee that:

1) You will not be asked to enter any sensitive information that may identify you and that your anonymity throughout this research is guaranteed. Only I, Nicole Agius, will have access to the data which shall be stored on a secure drive. All data will be stored for a maximum of two years before being destroyed.

2) All information provided in this survey will be used solely for the purpose of this dissertation.

3) Participation is entirely voluntary, and you are free to quit the survey at any moment and for no reason. All data collected prior to quitting the survey will be deleted from records. You are free to withhold your responses or close the window at any time.

4) There is no deception in the data collection of this questionnaire, and no risks (either physical or otherwise) are foreseen.

5) Your rights under the General Data Protection Regulation (GDPR) and the Malta Data Protection Act 2018 to access, rectify, and where applicable erase your data from records will be upheld at any time, upon request.

Your participation and time to contribute to this research are greatly appreciated.

Should you require any information or clarifications, please do not hesitate to contact me via email on nicole.n.agius.20@um.edu.mt

Sincerely,

Nicole Agius

By clicking 'Next' to continue, you are consenting to take part in this study.

Demographic Information

1. Gender

- ○ Male
- ○ Female
- ○ Prefer not to disclose

2. Age

- ○ 18-24 years old
- ○ 25-34 years old
- ○ 35-44 years old
- ○ 45-54 years old
- ○ 55-64 years old
- ○ 65+ years old

3. Level of Education

- ○ Primary
- ○ Secondary
- ○ Post-Secondary
- ○ Undergraduate
- ○ Postgraduate

4. Employment Status

- ○ Full-time
- ○ Part-time
- ○ Unemployed
- ○ Retired
- ○ Student
- ○ Other: _____

5. Income

- ○ €0 - €24,999
- ○ €25,000 - €49,999
- ○ €50,000 - €74,999
- ○ €75,000 - €99,999
- ○ €100,000 +
- ○ Prefer not to disclose

Gambling Behaviour

1. How long have you been engaging in sports betting?

- ◯ I do not engage in sports betting
- ◯ Less than 1 year
- ◯ 1-3 years
- ◯ 4-6 years
- ◯ 7-10 years
- ◯ More than 10 years

2. On average, how much money do you spend on sports betting per month?

- ◯ €0
- ◯ Less than €50
- ◯ €50-€100
- ◯ €101-€250
- ◯ €251-€500
- ◯ More than €500

Risk Perception

1. How risky do you perceive sports betting to be?

	1	2	3	4	5	
Not risky	○	○	○	○	○	Extremely risky

2. How do your wins and losses affect your perception of risk in sports betting?

- ○ Wins decrease risk perception
- ○ Wins increase risk perception
- ○ Losses decrease risk perception
- ○ Losses increase risk perception
- ○ No impact

3. Do you believe you can influence the outcome of sports bets based on your knowledge of the sport?

- ○ Strongly Agree
- ○ Agree
- ○ Neutral
- ○ Disagree
- ○ Strongly Disagree

4. How confident are you in your ability to win money from sports betting?

- ○ Very Confident
- ○ Confident
- ○ Neutral
- ○ Not Very Confident
- ○ Not Confident At All

5. Do you agree with the following statement: "Sports betting is a form of entertainment rather than a way to make money"?

- ○ Strongly Agree
- ○ Agree
- ○ Neutral
- ○ Disagree
- ○ Strongly Disagree

Susceptibility to Problem Gambling

1. Have you ever experienced any of the following due to sports betting?

- ☐ Financial problems
- ☐ Emotional distress
- ☐ Relationship issues with other people (e.g. partner, other family members, friends)
- ☐ Loss of interest in other activities
- ☐ None of the above
- ☐ Other: _____

2. How frequently do you wager on sports?

- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Rarely
- ○ Never

3. To what extent do your friends and family influence your sports betting habits?

	1	2	3	4	5	
Not at all influential	○	○	○	○	○	Extremely influential

4. How often are you exposed to gambling advertisements and promotions?

- ◯ Never
- ◯ Rarely
- ◯ Sometimes
- ◯ Often
- ◯ Very often

5. How does media portrayal of sports betting such as advertisements, endorsements and news coverage influence your sports betting behaviour?

	1	2	3	4	5	
Not at all influential	◯	◯	◯	◯	◯	Extremely influential

Financial Implications of Sports Betting

1. How much financial stress do you experience due to sports betting?

	1	2	3	4	5	
None	◯	◯	◯	◯	◯	Extreme

2. Do you believe your income level affects your sports betting behaviour?

- ◯ Yes
- ◯ No
- ◯ Not sure

3. Do you set a specific budget for sports betting?

- ◯ Yes, always
- ◯ Yes, sometimes
- ◯ No, I don't set a budget

4. How do betting losses impact your overall financial situation?

	1	2	3	4	5	
Not at all	◯	◯	◯	◯	◯	Severly

5. How does your income influence your perception of the risks associated with sports betting?

- ◯ Significantly decreases perceived risk
- ◯ Slightly decreases perceived risk
- ◯ Slightly increases perceived risk
- ◯ Significantly increases perceived risk
- ◯ No impact