

Blowing the Whistle: Exploring the Experiences of Early-Career New Zealand Rugby
Referees

by

Javeed Nur Ali

BSp., Unitec Institute of Technology, 2014
MBus., Auckland University of Technology, 2016
MPhil., Auckland University of Technology, 2018

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Faculty of Health and Environmental Sciences
School of Sport and Recreation

Abstract

The extent to which officials stay in the role varies (Bernal et al., 2012; S. L. Forbes & Livingston, 2013), but the reasons why are still not well understood. Although researchers have explored continuation amongst officials, a comprehensive understanding is still lacking (S. L. Forbes & Livingston, 2013). A growing body of knowledge outlines various aspects of officials' experience, including factors related to initial and continuing engagement (Auger et al., 2010; Hancock et al., 2015; Livingston & Forbes, 2017). Other studies have identified that attrition is linked to organisational shortcomings (e.g., Dosseville et al., 2013; S. L. Forbes & Livingston, 2013; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016; Rayner et al., 2016; Sam et al., 2018; Warner et al., 2013). One clear area of focus needed within this growing body of work is the role and influence of organisations in the experience of newer officials. Furthermore, as per Cuskelly and Hoye (2013), we know that the experience of early-career referees (i.e., those who have been refereeing for five years or less) is different than their more seasoned colleagues (i.e., six years or more), and the nature of that experience affects continuation (Cuskelly & Hoye, 2013; MacMahon et al., 2014). Further research based on referee tenure is needed.

A three-study, multimethod design was carried out for this project. Both secondary and primary data were obtained. Study 1 found that early-career referees (ECRs) and seasoned referees (SRs) are distinct in many ways, indicating that Rugby Referee Associations (RRAs) ought to customise approaches for the two groups. It also highlighted that RRAs are central to the ECR experience. Study 2 had four foci covering the influence of a number of constructs and referees' intention to continue. It was found that intrinsic motivation explains continuation, but unexpectedly no moderation effects were found for perceived organisational support, organisational commitment and role commitment. Further, it was found that multiple organisational factors contribute towards continuation, and that a sense of community influences the relationships between abuse and intention to continue. Study 3 highlighted that RRAs quite profoundly influence the experience of ECRs. Remuneration ambivalence, broader recognition, disparate support systems and perceptions of inequity are prominent themes within that influential role. One important takeaway from this project is that the more positive their experience, the more likely an ECR is to continue as a referee.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Ethics Approval

Ethics approval was granted by the Auckland University of Technology Ethics Committee on 19 August 2019 (19/280, Appendix A)

List of Terms

Early-Career Referee (ECR) – A rugby referee who has been refereeing for five years or less.

Extrinsic Motivation (EM) - is derived from external sources (Ryan & Deci, 2000), and for officials, these may be remuneration, recognition by others, and an opportunity to exercise influence and power (Hancock et al., 2015).

Farah Palmer Cup – The premier National Provincial Championship rugby competition for women

Heartland Championship – The second tier National Provincial Championship competition for men

Intention to Continue (ITC) - Is “a measure of the likelihood that a person will engage in a given behaviour [which] may be termed behavioural intention” (Ajzen & Fishbein, 1980, p. 5).

Intrinsic Motivation (IM) - An individual’s inherent and natural drive to seek out activities and challenges that promote social and cognitive development (Vansteenkiste et al., 2004).

ITM Cup – The premier National Provincial Championship competition for men sponsored by ITM (2010-2015)

Mitre 10 Cup (M10 Cup) - The premier National Provincial Championship competition for men sponsored by Mitre 10 Cup (2016-2020)

NPC – The premier National Provincial Championship rugby competition for men.

Officiating organisation - An organisation responsible for the development, recruitment, retention, and appointment of officials to competitive fixtures within a sport or organisation.

Organisational Commitment (OC) - Reflects “a desire, a need, and/or an obligation to maintain membership in an organisation” (Meyer & Allen, 1991, p. 61)

Perceived Organisational Support (POS) - The extent to which an individual believes that an organisation values their contribution and cares for them (Kurtessis et al., 2017).

Provincial Union (PU) – The New Zealand Rugby provincial union that the officiating organisation is associated with.

Role Commitment (RC) - A strong sense of involvement and identification with their occupation (Blau, 1985)

Role-Specific Motivation (RSM) - Specific roles have benefits which attract individuals to engage.

Rugby – The sport of rugby union

Rugby referee or referee - An individual who is responsible for ensuring that a competitive fixture of rugby is played fairly and within its jurisdictions. References to referees in this project are to those who are part of this study.

Rugby Referees Association (RRA) - An organisation responsible for the development, recruitment, retention, and appointment of officials to competitive fixtures within a sport or organisation.

Seasoned Referee (SR) – A rugby referee who has been refereeing for more than five years.

Sense of Community (SoC) – Where individuals believe they mean something to others within the group and have faith that the group's needs will be met through a commitment to others (McMillan & Chavis, 1986).

Social Motivation (SM) - A set of related drivers to integrate oneself within social settings through officiating

Sport Related Motivation (SRM) – Context-specific factors (i.e., specifically related to officiating and the sport itself) which motivates officials.

Official or match official – An individual or individuals who are responsible for ensuring that a competitive fixture is played fairly and within its jurisdictions. References to officials in this project are to those who are not part of this study.

Chapter 1 - Introduction

The extent to which officials stay in the role varies (Bernal et al., 2012; S. L. Forbes & Livingston, 2013), but the reasons why are still not well understood. Although researchers have explored continuation amongst officials, a comprehensive understanding is still lacking (S. L. Forbes & Livingston, 2013). Numerous studies have explored motivation, an important aspect of the underlying psychology of officials. However, the construct is not as useful when conceptualised and operationalised broadly and alone is a weak predictor of an official's ongoing engagement (Giel & Breuer, 2020; Hoye et al., 2008). A narrower focus on motivation is needed at dimension level. Likewise, conceptualising and operationalising onset and continuing motivation separately has value and has precedent elsewhere (Auger et al., 2010; Hancock et al., 2015; Livingston & Forbes, 2017).

The experience of an official is multifaceted (Ridinger, Tingle, et al., 2017), including factors related to the organisation they are connected to. Insights on these organisations will help sport managers take action to facilitate continued engagement. Studies have found that organisational and managerial factors influence the continuation of officials (S. L. Forbes & Livingston, 2013; Warner et al., 2013). It has increasingly become a priority to understand better officials' perceptions of organisational support (e.g., Cuskelly & Hoye, 2013; Giel & Breuer, 2020; Ridinger, Kim, Warner, & Tingle, 2017).

Furthermore, the experience of early-career officials (i.e., those who have been officiating for five years or less) as per Cuskelly and Hoye (2013), is different from their more seasoned colleagues (i.e., six years or more) and the nature of that experience affects continuation (Cuskelly & Hoye, 2013; MacMahon et al., 2014). Whilst experiences have not yet been empirically contrasted by tenure, evidence suggests that subgroups within officiating organisations are treated differently (Kellett & Warner, 2011). Very little research has focused on this important contrast. This is important because many early-career referees (ECRs) do not often continue after five years (Cuskelly & Hoye, 2004; MacMahon et al., 2014). Given the evidence discussed above, this project will examine the experiences of early career rugby union referees across New Zealand to understand what predisposes them to continue officiating. This examination will also have an explicit focus on the influence of the officiating organisation.

Thus, this project aims to generate insights in order to foster quality experiences for ECRs. This project used a three-study approach. Study 1 analyses registration and

end-of-season survey data provided by the industry partner, New Zealand Rugby (NZR). Study 2 used a quantitative survey to explore four models which influence the ECR experience. These included (i) motivation-Intention to Continue (ITC) relationships, (ii) the intervening effect of Perceived Organisational Support (POS), Organisational Commitment (OC) and Role Commitment (RC) on the motivation-ITC relationships, (iii) the influence of other organisational factors on ITC and (iv) the intervening effect of Sense of Community (SoC) on the abuse-ITC relationship. Study 3 explored perceptions of organisational influence towards a quality experience through interviews. This chapter outlines the rationale for this project, specifies the purpose of this project, and provides an overview of the thesis structure, associated conference presentations, industry reports and research publications.

1.1 Aim of Research

This project aims to generate insights in order to foster quality experiences for ECRs. To explore the aim of this project, five research questions were developed. These research questions we developed from the current knowledge existing in the literature, the needs of the industry partner and the experiences of the researcher as a rugby referee. The five research questions are effectively tied together by their focus on the ECR experience. The five research questions also complement each as they can be explored using multiple research methodology as has been implemented.

1. What motivation dimensions (intrinsic, extrinsic, sport-related, social, or role-specific) influence early career rugby referees in New Zealand to begin and continue refereeing?
2. How are perceived organisation support, organisational commitment and role commitment related to motivations of officials and their intention to continue?
3. What organisational factors are related to the continuation of early-career rugby referees in New Zealand?
4. How does a sense of community affect the relationship between abuse of officials and their intention to continue?
5. How do early-career rugby referees perceive organisational influence contributes towards a quality experience?

1.2 Rationale for Research

The shortage of match officials at the grassroots level is evident in both the academic literature (Jacobs et al., 2020; Jordan et al., 2019; Livingston & Forbes, 2017;

Ridinger, 2015; Zvosec et al., 2021), and the mainstream media, (Kenny, 2022; Meagher, 2022; Pearson, 2021; Watson, 2021) but a coherent plan to rectify this is not yet evident (S. L. Forbes & Livingston, 2013). In effect this highlights a problem that needs exploration and ultimately a solution. Retention of referees, often operationalised as their “intention to continue”, does need to be a focal point, especially for ECRs. The majority of referee research has recently focused on worsening abuse (Dawson et al., 2021; Jacobs et al., 2020; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019; Webb, Rayner, et al., 2019). However, other aspects of the referee experience warrant study, including the support an organisation can provide. While in recent years, scholarly inquiry into the role of refereeing organisations has increased (e.g., Baldwin & Vallance, 2016; Giel & Breuer, 2020, 2021; Minjung Kim, Kim, Simmonda, & Warner, 2022; Livingston & Forbes, 2016, 2017; Wicker & Frick, 2016), it is evident that further research is required to understand how refereeing organisations can support and increase retention.

The experience of officials is multifaceted (Ridinger, Tingle, et al., 2017) including factors related to the organisation they are connected to. Studies have found that organisational and managerial factors influence the continuation of officials (Forbes & Livingston, 2013; Warner et al., 2013). It has increasingly become a priority to better understand referee perceptions of organisational support (e.g., Cuskelly & Hoye, 2013; Giel & Breuer, 2020; Ridinger, Kim, Warner, & Tingle, 2017), commitment (e.g., Barnhill et al., 2018; C. E. Gray & Wilson, 2008), other organisational factors (e.g., Baldwin & Vallance, 2016a; Ridinger, Kim, et al., 2017), sense of community (e.g., Warner et al., 2013) and abuse (e.g., Rayner et al., 2016). In contrast to players and coaches within organised sport (Livingston et al., 2017), a lot less is known about officials and their experience being connected to organisations. All of these aspects of the officiating experience have been found to influence continuation.

Furthermore, the experience of early-career referees (i.e., those who have been refereeing for five years or less) as per Cuskelly and Hoye (2013) is different than their more seasoned colleagues (i.e., six years or more), and the nature of that experience affects continuation (Cuskelly & Hoye, 2013; MacMahon et al., 2014). Whilst experiences have not yet been empirically contrasted by tenure, evidence suggests that subgroups within sport referee organisations are treated differently (Kellett & Warner, 2011). Very little research has focused on this important contrast. This is crucial because many early-career referees (ECRs) do not often continue after five years (Cuskelly & Hoye, 2004; MacMahon et al., 2014). This research aims to generate insights in order to foster quality experiences for ECRs. The study expands the body of referee research in

three important ways. First, the motivation of referees is explored in a nuanced way, distinguishing between *onset* motivation (i.e., drivers as one started to referee) and *continuing* motivation (drivers of one's ongoing involvement) as referee motivation has been reported to change over time (Hoye et al., 2008). Second, the literature is extended regarding the role of officiating organisations. Third, this study uses a multimethod approach which uses both numeric and text-based data to explore the aim of this project. Thus, by way of contribution, this project has both practical and theoretical implications.

1.3 Research Context

As alluded to previously, this study explores the experiences of ECRs in the New Zealand rugby context to generate insights in order to foster quality experiences for ECRs. Rugby is a well participated sport in New Zealand. However, the shortage of referees has been a worry for a considerable time. In 2017, New Zealand Rugby wanted to retain 80% of referees under 45. However, only 68% were retained (New Zealand Rugby, 2018). It was identified by the industry partner for this project that not enough is known about referee participation and attrition, which is also consistent with literature (Hancock et al., 2015). Furthermore, it was identified by the industry partner that it experiences its most significant attrition within the first five years of joining a Rugby Referees Association (RRA). This partnership and the researchers' experiences as a rugby referee has contributed to the framing of this research project. Once again, this aligned with related research (Cuskelly & Hoye, 2004; MacMahon et al., 2014). Thus, the use of a pragmatic approach is appropriate for this study. A pragmatic approach orients toward solving real-world, practical problems (Feilzer, 2010). This approach allows for the construction of knowledge based on the reality of the world we experience (Johnson & Onwuegbuzie, 2004).

With these insights in mind, it was evident that the experiences of ECRs require further exploration. While recent research has highlighted that abuse contributes to adverse outcomes for officials (e.g., Dawson et al., 2021; Jacobs et al., 2020; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019; Webb, Rayner, et al., 2019), other studies have identified that attrition is linked to organisational shortcomings (e.g., Auger et al., 2010; Balch & Scott, 2007; Dosseville et al., 2013; S. L. Forbes & Livingston, 2013; Hancock et al., 2015; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016; Sam et al., 2018; Titlebaum et al., 2009; Warner et al., 2013). Therefore, this project took an organisational approach to understand the influence of RRAs on the ECR experience in the New Zealand rugby context.

1.4 Thesis Structure

This thesis consists of seven chapters (Figure 1). Chapter one provides the rationale for the project as well as the purpose, thesis structure, and a list of conference presentations, industry reports and journal publications. Chapter two is a literature review of the research on officials. Constructs of interest included motivation, perceived organisational support, organisational commitment, role commitment, other organisational factors, sense of community, abuse, and intention to continue. Chapter three provides an overview of the research design for each study as well as the research paradigm and participants. Chapter four presents the results from the registration and end-of-season survey data, which includes a short discussion bringing the results together with the relevant literature. Chapter five is the presentation of the results from the quantitative survey disseminated. Like chapter four, it concludes with a short discussion bringing the results together with relevant literature. Chapter five also explores the second research objective. Chapter six presents the findings from the interviews, which are discussed with the relevant literature. This chapter explores the third research objective. Chapter seven combines common findings from the three studies and provides a discussion. A conclusion, acknowledgement of limitations and suggestions for future research all make up chapter seven.

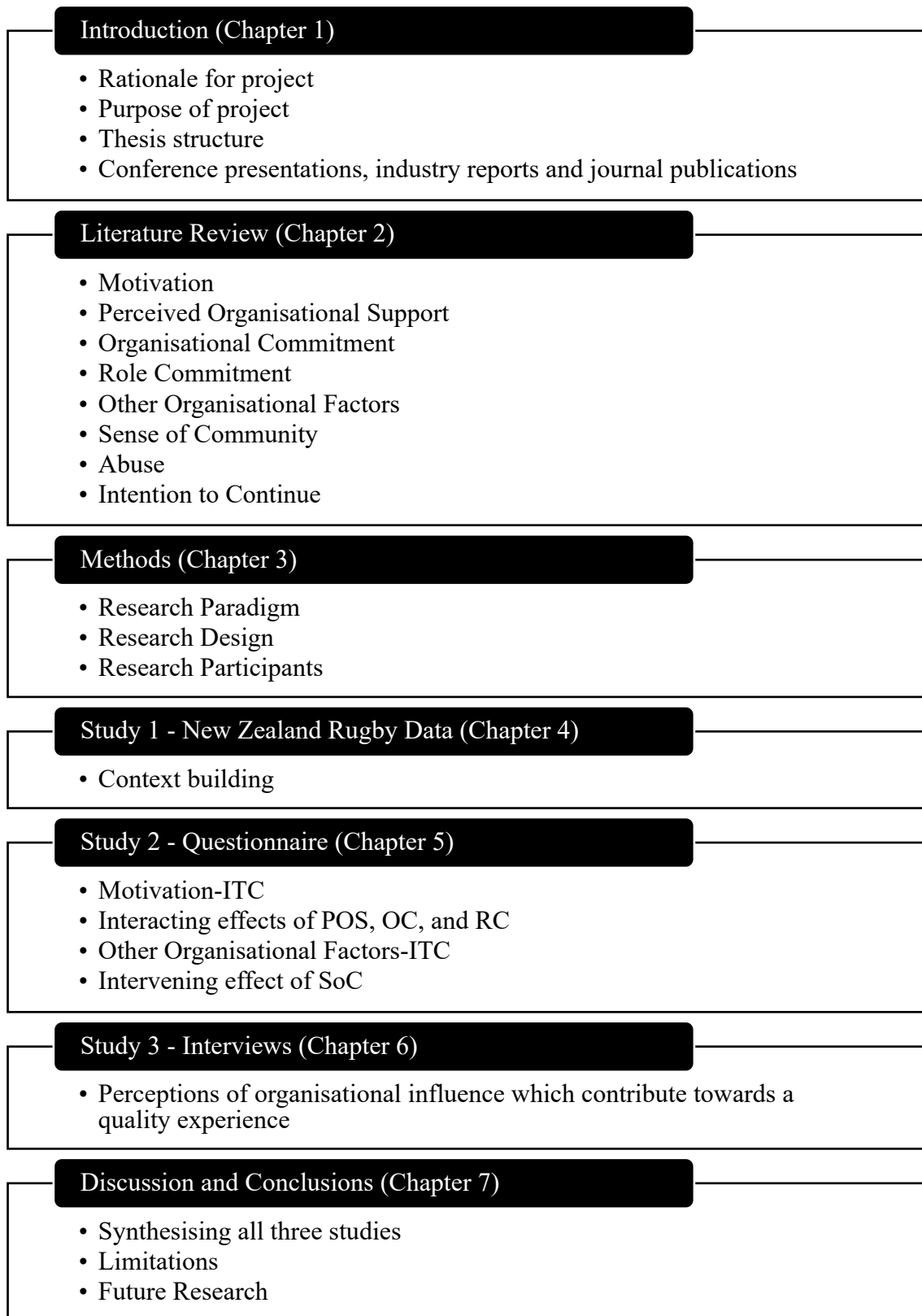


Figure 1 - Thesis Schematic

1.5 Reports, Presentations and Publications

1.5.1 Industry Reports

Ali, J.N., Naylor, M., Ferkins, L. (2020, June). Blowing the Whistle: The Experiences of Rugby Referees in New Zealand - Phase One: NZR Registration & Survey Data (2010-2019). Report prepared for New Zealand Rugby. Auckland: AUT SPRINZ.

Ali, J.N., Naylor, M., Ferkins, L. (2021, June). Blowing the Whistle: The Experiences of Rugby Referees in New Zealand - Phase Two: 2020 Rugby Referee Survey. Report prepared for New Zealand Rugby. Auckland: AUT SPRINZ.

Ali, J.N., Naylor, M., Ferkins, L. (2022, June). Blowing the Whistle: The Experiences of Rugby Referees in New Zealand - Phase Three: 2021 Early-Career Rugby Referee Interviews. Report prepared for New Zealand Rugby. Auckland: AUT SPRINZ.

1.5.2 Conference Presentations

Ali, J.N., Naylor, M., Ferkins, L. (2019, December). The experiences of sport officials: Commitment and perceptions of organisational support. *Presentation at the 25th Sport Management Association of Australia and New Zealand (SMAANZ) Conference*, Christchurch, New Zealand.

Ali, J.N., Naylor, M., Ferkins, L. (2020, December). Do I stay or do I go? The experiences of early-career rugby referees who continue. *Presentation at the 26th Sport Management Association of Australia and New Zealand (SMAANZ) Conference*, Online

Ali, J.N., Naylor, M., Ferkins, L. (2021, August). Blowing the Whistle: The experiences of early career rugby referees - A three-phase study *Presentation at the Sport Management Association of Australia and New Zealand (SMAANZ) Higher Degree Research (HDR) Conference*, Online

Ali, J.N., Naylor, M., Ferkins, L., Stewart, T. (2021, December). Fair play or foul play? The experiences of early-career and seasoned rugby referees. *Presentation at the 27th Sport Management Association of Australia and New Zealand (SMAANZ) Conference*, Online

1.5.3 Publications

Ali, J.N., Naylor, M., Ferkins, L., Stewart, T. (under review). Early career and seasoned referees: Contrasting motivation, perceptions of organisational support and intention to continue. *European Sport Management Quarterly*

Chapter 2 - Literature Review

Chapter 2 is a review of literature related to this research project exploring the early-career rugby referee experience. The literature review starts by broadly describing and synthesising literature about officials. This is followed by a review of the constructs examined in this study – motivations, perceived organisational support, organisational commitment, role commitment, other organisational factors, sense of community, abuse, and intention to continue. As will be evident in the following, there are important gaps in the body of related literature which justify further research.

2.1 Match Officials

The requirements for many team sporting matches on the field often include two teams, a venue, equipment and an official to ensure the game is played fairly and within the rules. Yet, officiating is generally the most overlooked aspect of organised sport (Doan & Smith, 2018). Officials play an integral role within organised sport at all levels (Livingston et al., 2017) and it is well documented that there is a shortage of officials in many community and grassroots contexts (Auger et al., 2010; Cuskelly & Hoye, 2004; Doan & Smith, 2018; Jacobs et al., 2020; Jordan et al., 2019; Kellett & Shilbury, 2007; Kellett & Warner, 2011; Livingston & Forbes, 2017; Nazarudin et al., 2009; Ridinger, Kim, et al., 2017; Titlebaum et al., 2009; Warner et al., 2013; Webb et al., 2017; Zvosec et al., 2021). A shortage means that the workload of many officials is high (Cuskelly & Hoye, 2004), and performance can diminish, ultimately affecting the experience of those involved (Baldwin, 2013b). Despite officials playing a vitally important role in sport, they are often treated as outsiders, under-resourced and misunderstood (Livingston et al., 2017).

Livingston et al. (2017) argue that the ongoing marginalisation of officials should no longer be accepted. This marginalisation leads to officials being viewed as independent contractors rather than part of the sport. They note that it can be best described as an *us versus them* mentality. This mentality ostracises officials devaluing their existence within the sport (Livingston et al., 2017). Baldwin, (2013a) asserts that the marginalisation and negative attitudes can adversely affect the motivation to become and continue as an official, which can be accentuated by the media.

The media provide access for the sporting community to watch and keep up with the results of their favourite teams or athletes. However, media also influence how fans perceive athletes, teams, and officials. Baldwin (2013a) argues that the media normalise

the abuse and violence towards officials, creating a societal norm. This is made worse with negative media coverage and public commentary toward officials (Gill, 2015). The media likely contributes to athletes and fans having negative views of officials (Balch & Scott, 2007). As Cuskelly and Hoyer (2004) point out, it would be preferable for the media to highlight the integral role that officials play within sport. Sport organisations have made numerous attempts to mitigate negative perceptions of officials, but with seemingly mixed success.

The Australian Football League (AFL) has undertaken numerous initiatives to improve how its officials are perceived. These have included themed weekends whereby officials are lifted up in an attempt to foster understanding and empathy. Implementation of such initiatives indicates that the AFL understands that such negative attitudes exist and is actively trying to address them (Gill, 2011, 2015, 2016). While negative sentiments exist towards officials, stakeholders indicated that elite officials do an average or better job interpreting the rules of Aussie Rules football (Gill, 2011). In the grassroots context, 80% of participants indicated that officials do a good to excellent job (Gill, 2016). These insights would suggest that the stakeholders appreciate officials within the sport. However, it has been noted that officials are perceived more negatively than others within sport (Balch & Scott, 2007). While public perceptions of officials can significantly impact decision-making, factors which influence initial participation are multi-faceted.

While there is a body of literature exploring why officials quit, it was reported some time ago that gaps in our collective understanding still remain (S. L. Forbes & Livingston, 2013), and there is an opportunity to explore officials' experiences more broadly. There is a growing body of knowledge outlining various aspects of officials' experience, including factors related to both initial and continuing engagement (Auger et al., 2010; Hancock et al., 2015; Livingston & Forbes, 2017). Other studies have identified that attrition is linked to organisational shortcomings (e.g., Auger et al., 2010; Balch & Scott, 2007; Dosseville et al., 2013; S. L. Forbes & Livingston, 2013; Hancock et al., 2015; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016; Sam et al., 2018; Titlebaum et al., 2009; Warner et al., 2013). One clear area of focus needed within this growing body of work is the role and influence of organisations in the experience of newer officials. Before this aspect is explored, the next section of this literature review will explore drivers of participation for officials.

2.2 The Motivation of Officials

The motivation for why people are driven to engage in various roles is important, and this is particularly true in the case of officials (Auger et al., 2010; Hancock et al., 2015). According to recent studies, officials' motivation includes intrinsic, extrinsic, sport-related, and social dimensions (Hancock et al., 2015). Intrinsic and extrinsic motivation have been thoroughly covered across many officiating contexts (Baldwin, 2013; Fowler et al., 2019; Livingston & Forbes, 2016, 2017; Symonds & Russell, 2018). Although sport-related and social dimensions of officials' motivation may be intuitive, they were only recently conceptualised by Hancock, Dawson, et al. (2015). In building on this work, Ridinger (2015) and Schaeperkoetter (2017) contributed towards a fifth dimension, the officiating role, which they argue more fully captures the complexity of officials' motivation. This additional dimension recognises the reality that officials are sport participants themselves and that the officiating *role* (as distinct to being a player) has its advantages. This dimension captures the appeal of flexibility (Ridinger, 2015; Schaeperkoetter, 2017) and the opportunity to feel similar emotions and excitement as playing (Baldwin, 2013a; Baldwin & Vallance, 2016a). These five motivation dimensions broadly capture an individual's motivation to officiate. The following sections explore each in more depth.

2.2.1 Intrinsic Motivation (IM)

IM is an individual's inherent and natural drive to seek out activities and challenges that promote social and cognitive development (Vansteenkiste et al., 2004). IM can be considered both foundational and a powerful driver of behaviour. For officials, this often includes proving that one can do it, personal development, enjoyment and passion for sport (Hancock et al., 2015). Over the years, many studies have explored officials' motivation and highlighted various IM elements.

Numerous studies have identified that devotion, love and passion for the sport motivates one to officiate (Auger et al., 2010; Bernal et al., 2012; Diotaiuti et al., 2017; S. L. Forbes & Livingston, 2013; Furst, 1991; Johansen, 2015; Kellett & Warner, 2011; Livingston et al., 2017; Livingston & Forbes, 2017, 2016; Ridinger, Kim, et al., 2017; Wolfson & Neave, 2007). Other intrinsic motivators include; using officiating as a form of fitness or exercise (Baldwin & Vallance, 2016a, 2016b; Bernal et al., 2012; Dell et al., 2016; Furst, 1991; Johansen, 2015; Schaeperkoetter, 2017), a source of physical activity or leisure (Carlsson, 2006; Phillips & Fairley, 2014), curiosity (Diotaiuti et al., 2017), excitement garnered (Bernal et al., 2012; Doan & Smith, 2018; Johansen, 2015), the

challenge (Bernal et al., 2012; Diotaiuti et al., 2017; Doan & Smith, 2018; Furst, 1991; Livingston & Forbes, 2016; Ridinger, 2015; Ridinger, Kim, et al., 2017; Warner et al., 2012), personal development (Auger et al., 2010), and drawing inspiration from the officials who have achieved elite status - imitating their success (Wicker & Frick, 2016). These elements, some of which are unique to officiating, have been found to drive sports officials' initial and continuing engagement.

Generally, IM has an important role in both the commencement and continuation of activity (Ryan & Deci, 2000). This is true in sport and for officials specifically (Auger et al., 2010; Hancock et al., 2015). While IM has been well explored within the officiating literature, further exploration is required to understand contextual nuances and its relationship with behavioural outcomes, including intention to continue. Although IM is fundamental, researchers and administrators should also be aware of other motivational dimensions for officials.

2.2.2 Extrinsic Motivation (EM)

EM is derived from external sources (Ryan & Deci, 2000), and for officials, these may be remuneration, recognition by others, and an opportunity to exercise influence and power (Hancock et al., 2015). Not all officials are exclusively (Bernal et al., 2012) or perhaps even predominantly intrinsically motivated, but rather previous studies have found that some engage in the pursuit of a variety of external benefits (e.g. Bernal et al., 2012; Carlsson, 2006; Diotaiuti et al., 2017; Furst, 1991; Johansen, 2015; Kellett & Warner, 2011; Livingston & Forbes, 2016; Parsons & Bairner, 2015). Other scholars have found that officials' EM may also include being shoulder tapped to engage (Auger et al., 2010; Furst, 1991; Ridinger, 2015), being encouraged by others (Auger et al., 2010; Furst, 1991; Livingston & Forbes, 2017), and even a perception that one can do better than the status quo (Furst, 1991). However, the most common aspect of EM that has been identified in the literature is remuneration (Bernal et al., 2012; Carlsson, 2006; Diotaiuti et al., 2017; Furst, 1991; Johansen, 2015; Kellett & Warner, 2011; Livingston & Forbes, 2016; Parsons & Bairner, 2015).

It has been reported that remuneration is a 'nice to have' for officials (Kellett & Warner, 2011; Schaeperkoetter, 2017). In other studies, it has been indicated that remuneration was an effective recruitment tool and very attractive to some (Cuskelly & Hoye, 2004; Kellett & Warner, 2011; Livingston et al., 2017; Livingston & Forbes, 2016; Ridinger, 2015; Warner et al., 2013). Indeed, remuneration drives the engagement of

some officials. However, remuneration has positive and negative outcomes for officials and stakeholders of the sport.

Remuneration has been found to have an indirect relationship with job satisfaction and commitment (S. Kim, 2017), and insufficient remuneration has been linked to discontinuation (S. L. Forbes & Livingston, 2013; S. Kim, 2017; Titlebaum et al., 2009). Evidence indicates that the sporting community may expect perfection from amateur officials if it is known that officials are being paid (Livingston et al., 2017), highlighting that attitudes towards remuneration are complex. The exploration of EM across match official tenure and distinguishing between onset and continuing EM is currently lacking in the scholarly literature. Another set of drivers for many officials relates to the context (i.e., the sport they officiate).

2.2.3 Sport-Related Motivation (SRM)

Context-specific factors (i.e., specifically related to officiating and the sport itself) also motivate officials. This may relate to their previous experiences with the sport or responding to emergent needs in the sport community. SRM for officials can also include wanting to contribute to their sport by giving back (Baldwin & Vallance, 2016b; Carlsson, 2006; Dell et al., 2016; Furst, 1991; Hancock et al., 2015; Kellett & Warner, 2011; Livingston & Forbes, 2017, 2016; Ridinger, Kim, et al., 2017; Schaeperkoetter, 2017; Warner et al., 2012; Wolfson & Neave, 2007). Other aspects of SRM include connection with the sport (Baldwin & Vallance, 2016a; Furst, 1991; Johansen, 2015; Ridinger, 2015), no longer being capable of participating in their sport (Baldwin & Vallance, 2016a; Carlsson, 2006; Furst, 1991; Livingston & Forbes, 2016), seeking continued involvement in the sport (Baldwin & Vallance, 2016a, 2016b) and a shortage of officials (Livingston & Forbes, 2017, 2016; Ridinger, 2015).

Another driver of some officials are policies in some sport communities mandating that each team must have an official (Dosseville et al., 2013; Livingston & Forbes, 2016). The motivation of those who engage in officiating initially, for this reason, is not straightforward but may reflect SRM to the extent that these individuals are making a sacrifice to ensure that others, maybe including their children, can participate in a sport they may already be profoundly connected to.

All in all, SRM plays an important role in officials' engagement. Officials report a willingness not only to serve the sport by giving back but also responding to a need within their sport to ensure participation opportunities. Although SRM drives officials, further exploration is required to understand how this may differ at different stages during

an official's career. This motivational dimension has yet been extensively explored, particularly alongside the other motivational dimensions. Having established that IM, EM and SRM are important drivers of officials' engagement, we also know that social factors drive officials' engagement, and these are covered next.

2.2.4 Social Motivation (SM)

SM in an officiating context captures a set of related drivers to integrate oneself within social settings through officiating. This involves meeting people, making friends and experiencing new things with others (Hancock et al., 2015). This motivation is increasingly the focus of officiating research, and it justifiably sits alongside IM, EM and SRM as a distinct dimension of referees' motivation. Social connections are particularly important for officials at the grassroots level as they are often isolated with few colleagues nearby (Baldwin & Vallance, 2016a). The opportunity to meet new people, travel (Friman et al., 2004; Jiranek et al., 2013; Johansen, 2015; J.-W. Wang et al., 2011), maintain connection with the sporting community (Carlsson, 2006; Livingston & Forbes, 2017, 2016), having officiating friends and close colleagues (Livingston & Forbes, 2017; Parsons & Bairner, 2015; Ridinger, 2015), camaraderie and support from other officials (Baldwin & Vallance, 2016a) were some of the social drivers for officials.

It has been well documented that a sense of community is an important aspect of the officiating experience (Kellett & Warner, 2011; Livingston & Forbes, 2017; Ridinger, 2015; Warner et al., 2013), and this relates to social motivation. Therefore, rugby referee managers could explore creating environments that facilitate connections and friendship (Kellett & Shilbury, 2007). Doing so means that officials can connect with others to support them through issues they may encounter during their experiences (Cuskelly & Hoye, 2004, 2013; Livingston & Forbes, 2017; Wolfson & Neave, 2007). As with other dimensions, an important next step to advance our understanding of this motivational dimension is to contrast SM across ECRs and SRs and establish how SM may differ at role onset versus on a continuing basis.

2.2.5 Role-Specific Motivation (RSM)

In some contexts, specific roles have benefits which attract individuals to engage. Increasingly, it is clear this is the case for officiating. RSM differs from SM insofar as the benefits or characteristics of officiating make it an attractive choice for those involved with the sport. Research has shown that particular aspects of being an official make it attractive to those deciding to continue as a player, become a coach or discontinue the

sport altogether (Baldwin, 2013a; Ridinger, 2015; Schaeperkoetter, 2017). One of the benefits of becoming an official is lessened commitment. For example, many officials do not have to be available every week. This works well for officials to balance personal or work commitments (Ridinger, 2015; Schaeperkoetter, 2017).

Other elements of RSM include the emotions felt by the official. In one study, an official who was interviewed noted that coaching a rugby team did not emulate the adrenalin rush, action and suspense of rugby, whereas officiating did (Baldwin, 2013a). This sentiment is likely shared by others and suggests that the officiating role somehow mirrors playing the sport, which can serve as motivation. While RSM is newly conceptualised in this study, it warrants further exploration to understand if drivers unique to the officiating role link to engagement, intention to continue and other aspects of the experience – particularly for ECRs. As has now been established, the motivation of officials is multi-faceted, comprising five dimensions. However, less is known about how these motivation dimensions may differ at role onset compared to on an ongoing basis.

2.2.6 Onset and Continuing Motivation

Despite a compelling rationale to do so in the context of officials, onset motivation (i.e., drivers as one started to officiate) and continuing motivation (drivers of one's ongoing involvement) have only recently been conceptualised separately (Hancock et al., 2015). This is an important emerging area amongst the officiating literature, as insights on this will be valuable to sport managers. Specifically, onset and continuing motivation are yet to be linked to other aspects of the officiating experience or contrasted between ECRs and SRs. For ECRs, onset motivation will inherently be more top of mind than for SRs. Continuing motivation is likely to be more closely related to ITC than onset motivation. Some work has been done to understand the motivation of officials along their journey (Auger et al., 2010; Hancock et al., 2015; Livingston & Forbes, 2017), and at least one study has reported that onset motivation differs from continuing motivation (Hoye et al., 2008).

Although motivation is an important aspect of the broader officiating experience, it does reflect a mostly internal psychological phenomenon, and it is important to consider what else in the environment influences the ultimate intention to carry on in the role. In fact, organisational factors have been found to influence the continuation of officials (S. L. Forbes & Livingston, 2013; Hancock et al., 2015; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016; Warner et al., 2013) and recent focus has been on perceived organisational support (Choi & Chiu, 2017; Cuskelly & Hoye, 2013; Giel &

Breuer, 2020; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016). Perceived organisational support has been used broadly in other contexts to good effect in order to understand intention to continue (Rhoades & Eisenberger, 2002). Thus, its role within the officiating experience potentially warrants focused attention to advance a more holistic understanding of motivation.

2.3 Perceived Organisational Support (POS)

It is important to consider the way in which officials perceive the organisation to which they are linked, and there is a construct in the management literature that makes for an appropriate lens to explore this. This is because support provided by an organisation to officials positively impacts their experience and continuation (Choi & Chiu, 2017; Cuskelly & Hoyer, 2013; S. L. Forbes & Livingston, 2013; Giel & Breuer, 2020; Hong et al., 2019; Hoyer et al., 2008; S. Kim, 2017; Livingston & Forbes, 2017, 2016). POS refers to the extent to which an individual believes that an organisation values their contribution and cares for them (Kurtessis et al., 2017). Therefore, if individuals perceive support from their organisation, it can have positive outcomes (Rhoades & Eisenberger, 2002).

POS is underpinned by Organisational Support Theory (OST), which captures fairness, supervisor support and job conditions (Eisenberger & Huntington, 1986; Rhoades & Eisenberger, 2002). OST explains how favourable treatments are perceived and leads to outcomes such as retention (Shanock et al., 2019). Within the context of OST, employers reward employees through pay, promotion, and socio-emotional benefits like approval. A positive perception of the organisation, through social exchange, increases trust, felt obligation and expectation where efforts conducted on behalf of the organisation will be rewarded (Kurtessis et al., 2017).

OST builds on the application of Social-Exchange Theory between employer and employee. Employees develop a perception of organisational support as a result of an employer's response to the socio-emotional needs of an employee and the employer's willingness to reward increased output and efforts (Baran et al., 2012; Eisenberger & Huntington, 1986; Rhoades & Eisenberger, 2002). OST suggests that the more positive resources an employer provides, the greater the perceived organisational support. Therefore, the more obliged an employee feels to reciprocate and support the organisation's pursuit of various outcomes (Caesens & Stinglhamber, 2020; Eisenberger & Huntington, 1986; Kurtessis et al., 2017; Rhoades & Eisenberger, 2002). According to OST, if employees experience favourable treatments, this is interpreted as the organisation being caring and supportive (Rhoades & Eisenberger, 2002). This positively

influences performance, engagement and retention (Shanock et al., 2019). The POS construct has origins in the human resources literature, where it has been used to help understand career commitment. Three predisposing conditions were found to increase POS (Rhoades & Eisenberger, 2002). These are discussed below.

The first predisposing condition that increases an employee's POS is supervisor support. This is the intentional support from superiors to support the employee achieve their outcomes. Leaders play a crucial role in providing resources and rewards. Hence, they are the source of greater organisational support compared to their peers and co-workers (Wayne et al., 1997). Support from more senior leaders is interpreted as organisational support compared to support from co-workers (Kurtessis et al., 2017). It was also found that transformational leadership, in contrast to transactional leadership, a short-term exchange for rewards like wages (Bass, 1990), was strongly related to POS. Transformative leaders show more concern for the needs of those working under them and empower them to dedicate themselves towards the organisation's goals (Kurtessis et al., 2017). Moreover, leader-member exchange was a strong indicator of POS (Kurtessis et al., 2017). Whereby if the leader provides substantial resources and support, the employee will likely reciprocate with performance and commensurate effort (Liden et al., 1997). While supervisor support is important to POS, the fairness of the support is also relevant.

Fairness is the second predisposing condition linked to POS (Eisenberger & Huntington, 1986). This is the perception of how fair a supervisor is to an employee. Fairness is made up of three forms of justice. Distributive justice, the fair distribution of outcomes, interactional justice, how an individual is treated when organisational decisions are made, and procedural justice, the processes determining how outcomes are distributed. Of the three, procedural justice was closely related to POS, followed by distributive and interactional justice (Kurtessis et al., 2017). Perceived organisational politics relates to favouritism, the presence of cliques, and a lack of meritocracy (Ferris & Kacmar, 1992). Perceived organisational politics has a strong and adverse relationship with POS, indicating that those willing to put the welfare of themselves and their in-group ahead of the organisation and its other members are highly damaging (Kurtessis et al., 2017). Furthermore, organisational rewards and job conditions were also found to influence POS.

Rhoades and Eisenberger (2002) describe organisational rewards and job conditions as the third and final predisposing condition to POS. Organisational reward and job conditions can include recognition, pay, job security, promotions, training,

autonomy and role stressors. This predisposing condition is made up of employee security and work role characteristics. In a subset of employee security and benefits, developmental opportunities were moderately related to POS compared to flexible work schedules (Eisenberger et al., 1997; Kurtessis et al., 2017). It could be explained that the moderate relationship between developmental opportunities with POS is because employees perceive that development opportunities are controlled by their organisations (Eisenberger et al., 1997). Benefits used (e.g., health insurance) were also weakly related to POS. Work role characteristics included job enrichments and role stressors. It is perceived that job enrichments are under the organisation's control in contrast to role stressors (Eisenberger et al., 1997). Job conditions are closely related to POS more than autonomy and decision-making participation. However, POS was less related to stressors like ambiguity, conflict and overload (Kurtessis et al., 2017). While the three predisposing conditions have differing relationships with POS, it is important to consider which has the biggest effect.

Fairness had the strongest relationship with POS of the three predisposing conditions (Kurtessis et al., 2017). Suggesting that the way one is treated has a strong impact upon their POS. Although officials are unlike employees in more traditional organisations, the perception of support is still vitally important and is very likely to influence their continuing engagement.

2.5.1 POS in the Officiating Context

While much of the literature regarding POS has been grounded in the business context, POS is a growing area of research amongst officials (e.g. Choi & Chiu, 2017; Cuskelly & Hoye, 2013; S. L. Forbes & Livingston, 2013; Giel & Breuer, 2020; Hong et al., 2019; Hoye et al., 2008; S. Kim, 2017; Livingston & Forbes, 2017, 2016). POS is generally based on the experiences of administrators and others in leadership roles within officiating organisations. Officials have reported officiating organisations value younger officials (Livingston & Forbes, 2017). This could explain the lack of POS felt by many officials (S. L. Forbes & Livingston, 2013). As a result, officials who indicate lower levels of POS are more likely not to continue officiating (Choi & Chiu, 2017). Whereas the presence of POS meant officials were more likely to continue (Livingston & Forbes, 2017). In contrast to the majority of the literature, it was found that POS had no impact on intention to continue for rugby union ECRs in Australia (Cuskelly & Hoye, 2013). While support is an important element of the officiating experience, there are certain times officials need more support.

One aspect of POS which has been well documented within the literature is the lack of support of officials in the disciplinary processes and sanctions in instances of misconduct. Officials stated limited support was available when reporting an incident of abuse (Cleland et al., 2017; Webb et al., 2018). Once the incidents are reported, the sanctions handed to offending individuals are not as expected by officials. Thus, not deterring unsavoury behaviour (Webb et al., 2017) leads to officials wanting more consistency when dealing with misconduct (Cleland et al., 2017). This lack of support has been noted as why officials do not continue officiating (Webb et al., 2018). Support during abuse incidents is important to ensure officials feel safe, but it has also been identified that support declines with experience.

Equally worrying is that POS declines over time (Livingston & Forbes, 2016). The decrease in POS over time could be viewed positively and negatively. Positively, organisations may anticipate that seasoned officials are more likely to have the necessary skills and experience to deal with issues they may encounter. In contrast, the lack of POS for more seasoned officials could be because officiating organisations focus more on new recruits. However, studies have mentioned that early-career official retention is an issue (Cuskelly & Hoyer, 2004; MacMahon et al., 2014). Therefore, if seasoned officials are being neglected by their organisations, this could create another issue whereby officiating organisations will haemorrhage seasoned and novice officials. Especially since the lack of POS is the strongest indicator of turnover intention (Choi & Chiu, 2017; Cuskelly & Hoyer, 2013; S. L. Forbes & Livingston, 2013; Livingston et al., 2017; Warner et al., 2013; Webb et al., 2018). In comparison, the presence of POS has a positive relationship with intention to continue (Cuskelly et al., 2008; Giel & Breuer, 2020; Livingston et al., 2017).

With the above literature review findings in mind, it will be interesting to understand the prevalence of POS within the rugby context in New Zealand. Considering that motivation is a relatively weak predictor of continuation (Giel & Breuer, 2020; Hoyer et al., 2008), there is an opportunity to understand the potential influence of the officiating organisation. Therefore, this study argues that positioning POS as an intervening variable is logically underpinned by OST and fills a gap in the body of related literature. Furthermore, no studies in top sport management journals have explored if POS has a mediating or moderating effect on the relationship between motivations and intention to continue in the officiating context.

2.4 Organisational Commitment (OC)

While the body of knowledge is increasing regarding POS, the commitment of officials towards their organisation is less explored. While there are limited opportunities for officials to move organisations, it is interesting to understand if they are committed to their organisation. OC is claimed to “reflect a desire, a need, and/or an obligation to maintain membership in an organisation” (Meyer & Allen, 1991, p. 61) and, as such, is made up of three components. These are affective, continuance, and normative commitment.

Affective commitment suggests that individuals are committed to their organisation because they want to be (Meyer & Allen, 1991). The antecedents of affective commitment have been conceptualised as; personal characteristics, structural characteristics, job-related characteristics, and work experiences (Mowday et al., 1982). This relates to an emotional attachment to, identification with, and involvement in the organisation (Meyer & Smith, 2000). Affective commitment has a negative relationship with turnover intentions and behaviour and a positive relationship with on-the-job behaviour. On-the-job behaviour encompasses attendance, organisational citizenship behaviour, and employee health and well-being (Meyer et al., 2002). The next component relates to what they have invested into the organisation.

Continuance commitment suggests that employees are committed because they have accumulated investments, which would be lost should they leave the organisation, and other comparable alternatives are limited (Meyer & Allen, 1991). The antecedents to continuance commitment are personal characteristics, alternatives and investments (Meyer & Allen, 1991). Continuance commitment has a negative relationship with turnover intention or turnover behaviour and a zero or negative relationship with on-the-job behaviour and employee health and well-being (Meyer et al., 2002). The final component explains the impact of social experiences.

Personal characteristics are also antecedent to normative commitment, socialisation experiences, and organisational investments. Normative commitment is defined as socialisation experiences which reinforce the appropriateness of remaining loyal to an employer (Meyer, Allen, & Smith, 1993). Normative commitment has a negative relationship with turnover intention or turnover behaviour, but contrastingly to continuance commitment, it has positive relationships with on-the-job behaviour and employee health and well-being (Meyer et al., 2002). Overall, OC has been found to have an influence on the behaviour of individuals.

All three components characterise an individual's OC and relate to employee turnover (Meyer & Allen, 1991). Within occupational settings, OC is a predictor of retention (Allen & Meyer, 1990; Meyer et al., 1993, 2002; Meyer & Allen, 1991). More so, affective commitment has a strong negative relationship with turnover intention and behaviour, followed by normative and continuance commitment (Meyer et al., 2002). The outcomes of organisational behaviour suggest that if organisations can support their employees, they will have greater performance and loyalty from their employees. Hence its importance in the paid workforce.

OC has been well explored within the management and organisational behaviour contexts. The strength of the OC literature within these contexts has led to OC being tested and explored within sport management. Within the sport management literature, OC has been explored in various settings, especially with volunteers. Studies have explored the OC of intercollegiate coaches (e.g. Turner & Chelladurai, 2005), volunteer coaches (e.g. Engelberg-Moston et al., 2009), volunteers at sports organisations (e.g. Engelberg et al., 2011), volunteer sport committee/board members (e.g. Cuskelly & Boag, 2001; Hoye, 2007) and event volunteers (Bang et al., 2009, e.g. 2013; Mykletun & Himanen, 2016; Park & Kim, 2013). This highlights a considerable interest in OC across the sport management discipline. Within this study, amateur rugby referees in New Zealand are primarily volunteers and do not get remuneration. Thus, it is anticipated that this study will extend the OC literature within the sport management discipline by understanding the levels of commitment amongst volunteer officials. Further, studies exploring the OC of officials have been limited.

Within the officiating context, several studies have explored the impact of sport commitment upon officials (e.g. Barnhill et al., 2018; Bernal et al., 2012; Cuskelly & Hoye, 2013; Diotaiuti et al., 2017; Furst, 1991; VanYperen, 1998). Many of these studies used the Sport Commitment Model (Scanlan et al., 1993b, 1993a, 2016). The Sport Commitment Model was initially developed to understand the commitment of youth sports participants (Lirgg et al., 2016). It also highlighted the antecedents of sport commitment - the resolve and desire to continue sport participation (Scanlan et al., 1993a). This study intends to extend the commitment literature by using the OC framework by Meyer and Allen (1991) within the officiating context, as it could be argued that officiating is a form of vocation. Using this framework will also provide a deeper understanding of the commitment of officials towards their organisation.

The only study found to test OC, as described by Meyer and Allen (1991), within the officiating literature is the study of Gray and Wilson (2008), which studied athletics

officials in Canada. They found that continuance commitment has a minimal relationship with intention to continue. It is interesting to note that OC has not been further explored in other contexts. In many instances' officials do not have the opportunity to move organisations and continue officiating, unlike paid employment. Therefore, if officials are not committed to their organisation, it could lead to discontinuation completely. Thus, further exploration of OC within officiating settings could be vital.

This study intends to extend the literature on OC in the officiating context by understanding the influence of OC as a moderator. It is posited that OC may intervene in the relationship between motivations and intention to continue officiating.

2.5 Role Commitment (RC)

To understand the officiating experience, it follows that consideration of how committed an individual is towards their role would also be important to know. Occupational commitment refers to an individual's positive attitudes towards their occupation or profession. Reflecting a strong sense of involvement and identification with their occupation (Blau, 1985). Like OC, Meyer et al. (1993) proposed that occupational commitment comprises of three components; affective, normative and continuance commitment. For many, officiating is not viewed as an occupation yet as a hobby or a secondary source of income (Barnhill et al., 2018; Titlebaum et al., 2009). Hence, occupational commitment will be referred to as RC within this study. RC best describes the commitment of officials to the role of officiating.

Affective commitment refers to an individual's intense connection to their role. Affective commitment is likely to develop when an individual's involvement in their role is a satisfying experience that gives opportunities to develop skills or do satisfying work (Meyer et al., 1993). Within the context of this study, affective RC could relate to the officials being appointed to matches that they find satisfying, ensuring they are neither mundane nor too difficult. Officiating organisations could further influence RC by identifying individuals' advanced skills outside of officiating to support the organisation in achieving its goals. The second component relates to the efforts or stature of individuals.

Continuance commitment refers to personal investments which are too great to lose. Examples of personal investments can include the time and effort one puts into acquiring the skills specific to the role and the associated status. These investments would be lost or be reduced in value should one change their role (Meyer et al., 1993). Although the skills developed within an officiating organisation are transferrable to officiating other

sports, the status of an individual at their officiating organisation could be lost should they leave their role. The final component of RC explores loyalty and obligation.

Normative commitment refers to the belief that one should remain in their occupation. This could be derived from a strong sense of obligation to reciprocate towards an organisation, which can include familial connections, involvement with a particular role and the receipt of financial support in pursuit of a career (Meyer et al., 1993). Much like how familial connections influence participation in a sport or at a particular club, officiating is not immune to family influence (Fowler et al., 2019; Perreau-Niel & Erard, 2015). Anecdotally, it is known, some rugby referees take up the role because of familial connections. Thus, it is anticipated that individuals with a familial connection to rugby refereeing will likely show high levels of normative role commitment. Overall, the three components of RC are relatable and likely important to the officiating experience.

Studies in leading sport management journals exploring RC have had a significant focus on coaching. This has included NCAA coaches (Cunningham et al., 2001; e.g., Cunningham & Sagas, 2004), intercollegiate coaches (e.g., Turner & Chelladurai, 2005), and also undergraduate sport management students who intended to enter the sport management profession (e.g., Cunningham et al., 2005). More recently, RC has been explored within the officiating literature. To the best of our knowledge, the study of Barnhill et al. (2018) is the only study to explore RC amongst volunteer officials. Amongst officials, RC has been found to negatively affect turnover intention (Barnhill et al., 2018).

Many studies within the officiating literature have used a unidimensional construct to measure occupational commitment or career commitment (e.g. Choi & Chiu, 2017; S. Kim, 2017; S. Kim & Yip, 2018; Ridinger, Kim, et al., 2017). Whereas using the RC framework provides a greater understanding of how individuals are committed to their role or occupation (Meyer et al., 1993). Outcomes of RC are positively related to job satisfaction (P. Wang et al., 2016) and negatively related to turnover intentions for both the organisation and the role (Weng & McElroy, 2012). Practically, if officiating organisations can foster an environment whereby officials are committed to their role, it is likely that this commitment could counter the negative trend of officials leaving. Thus, exploring RC within this study will further extend the knowledge within the sport management discipline, especially amongst volunteer officials.

2.6 Other Organisational Factors

The Referee Attrition Model (RAM), conceptualised by Warner and colleagues (2013), identified ten themes relating to the experience of officials which influence their continuation. These themes were relevant to different moments of the officiating journey (recruitment, retention, and advancement). Factors which influenced initial participation, or recruitment, included socialisation into the officiating community, staying part of the game, the need of the sport and remuneration. Factors which influenced discontinuation in the retention stage included problematic social interactions, training/mentoring, and the lack of an officiating community. For the advancement stage, policies, decision-making from administrators, and the lack of administrator considerations are factors which can lead to discontinuation.

While POS, OC and RC provide insight into organisational factors that influence the officiating experience, it is important to consider other organisational factors which the previous constructs may not cover. These factors have not yet been fully explored. These factors include administrator considerations, continuing education, access to coaching, rewards, and recognition. Each of them have been linked to intention to continue (Baldwin & Vallance, 2016a; Bernal et al., 2012; Cuskelly & Hoye, 2013; Furst, 1991; Kellett & Warner, 2011; Ridinger, 2015) and intention to quit (Auger et al., 2010; S. L. Forbes & Livingston, 2013; Hancock et al., 2015; S. Kim, 2017; Livingston & Forbes, 2016; Titlebaum et al., 2009; Warner et al., 2013). Thus, with potential significant impact on the retention of officials, it is vital to explore these organisational factors further.

2.6.1 Administrator Considerations

Administrators play a prominent role in the officiating experience. These can include appointing matches, providing support and other such responsibilities. Therefore, it is important to explore perceptions of administrators. This construct is defined as the perceptions of fairness and considerations from administrators and assigners (Ridinger, Kim, et al., 2017). Officials have highlighted deficiencies and unfairness of administrators. A common issue reported is the unfair selections for matches and the politics associated with it (Cuskelly & Hoye, 2004; Doan & Smith, 2018; Forbes & Livingston, 2013; Livingston & Forbes, 2017; Parsons & Bairner, 2015; Ridinger, Kim, et al., 2017; Titlebaum et al., 2009; Warner et al., 2013). In contrast, officials with over 10 years experience do not perceive internal politics as a barrier (Doan & Smith, 2018). These findings indicate that early-career officials are likely to notice and be subjected to

decisions influenced by internal politics. Furthermore, it could be posited that officials with more than ten years experience perceive this behaviour as normal. A further alternative explanation could be that those who have been involved in officiating organisations for more than ten years are now leaders and could be the drivers of the ingrained political behaviours. The political nature of officiating organisations can lead to favouritism.

Subgroups of officials are found to be treated differently by administrators. Within the Australian Rules context, more experienced or top-tier officials are given more consideration for important or prestigious matches than others (Kellett & Warner, 2011). Selecting the same group of officials for important or prestigious matches can show a lack of consideration and can potentially inhibit the development of other officials (Kellett & Warner, 2011; Warner et al., 2013). This behaviour can also be perceived as favouritism from administrators (Cuskelly & Hoyer, 2004; Doan & Smith, 2018; Forbes & Livingston, 2013; Livingston & Forbes, 2017; Parsons & Bairner, 2015; Ridinger, Kim, et al., 2017; Titlebaum et al., 2009; Warner et al., 2013). This favouritism can make officials feel on the outer but can also potentially impede their development. For officials who want to further their officiating career, this can be seen as a barrier towards attaining their goals. It has also been found that officiating organisations prioritise subgroups.

In contrast, some officiating organisations value younger officials over older ones, as they are perceived as the future (Livingston & Forbes, 2017). Suggesting that the majority of development opportunities would be given to younger officials. Which leads officiating organisations to pressure young officials to advance (Cuskelly & Hoyer, 2004). It could be posited that this pressure put upon younger officials is driven by the organisations' goals of having their officials within the high-performance system. This focus upon younger officials means that those not young enough are likely to be dismissed even if they may have all the required characteristics and skills.

The perceptions of administrators are an important aspect of an officials experiences as it explains why officials do not continue (Cuskelly & Hoyer, 2004, 2013; S. L. Forbes & Livingston, 2013; Parsons & Bairner, 2015; Warner et al., 2013), It is apparent that perceptions of administrators amongst officials have negative connotations. This could be because a significant amount of time is generally spent appointing and administrating officials. However, limited time is spent on developing officials (Livingston et al., 2017). This discrepancy could be because the investment by regional and national sport organisations favours player and coach development in contrast to the investment in officials' development (Cuskelly & Hoyer, 2004). Thus, officials are left to

feel like they are undervalued in the sporting system compared to coaches and players. It is apparent that administrator considerations impact the officiating experience and warrants further exploration amongst early-career officials. Another important organisational factor to consider is the ongoing education which supports development.

2.6.2 Continuing Education

Continuing education refers to the ongoing training and education received by officials to be suitably prepared to deal with the varying aspects of being an official (Ridinger, Kim, et al., 2017). Officials have reported that training provided to officials is inadequate and overemphasises theoretical aspects of officiating, with an emphasis on understanding and interpreting the rules and laws of the sport. This negatively impacts the amount of time spent on how to practically apply the rules and laws of the sport (Cleland et al., 2017; Dell et al., 2016; Warner et al., 2013). Which means that although the officials may understand the laws of their sport, they lack the necessary skills to identify when laws are broken and actions which need to be sanctioned or penalised. Furthermore, a focus on theoretical elements of officiating means they are unable to deal with situations which are likely to arise on gameday.

Another aspect of officiating is to be able to have the skills to handle conflict and inflammatory situations. It has been identified that possessing skills to deal with such situations would support the growth of an official (Baldwin, 2013a; Cleland et al., 2017; Cuskelly & Hoye, 2004; Dell et al., 2016; Walters et al., 2016; Warner et al., 2013; Webb et al., 2018). Developing coping strategies to deal with such stressors is essential for younger and less experienced officials (Balch & Scott, 2007). Thus, if an official cannot handle conflict and abuse, it can lead to anxiety and a lack of self-confidence (Ridinger, 2015). Consequently, without the necessary skills, officials are likely to receive a shock when beginning and could react negatively.

Overall, the continued education of officials has been poor and does not equip them with the relevant skills to deal with the multitudes of issues they may face (Cleland et al., 2017; Dell et al., 2016; Warner et al., 2013). This is reinforced in a study of English Rugby League officials where it was indicated that almost 30% reported that the training provided to officials is at a good or very good level, meaning that over two-thirds of the participants perceived training as neutral or worse (Webb et al., 2018). Ultimately, there evidence suggests that the education system for officials is deficient and needs to explore different approaches.

Some studies have explored different approaches to upskill officials. These approaches have included; using simulators (Moore et al., 2019; Samuel et al., 2019) such as virtual reality, web-based training (Put et al., 2013, 2016) and video-based training (Larkin et al., 2018). These recent technological advancements, especially in the player development realm, present new opportunities for officiating organisations to trial different techniques to develop well-rounded officials. Another opportunity to enhance the education of officials is to leverage the prior knowledge some officials may bring to officiating from their previous athletic or coaching careers (Baldwin & Vallance, 2015). With this information in mind, officiating organisations should use multiple learning situations to better engage the diverse learning styles of officials (Baldwin & Vallance, 2015).

Therefore, it can be posited that there is a shortcoming within the formalised education systems of officials. Education is one form of development officials receive. Another is the one-on-one support they receive from a coach. The support from coaches helps develop their skills further by providing feedback from game day, supporting them to be more competent as an official.

2.6.3 Access to Coaching

In the context of officiating, coaching is the formal support received to help develop an official's competencies (Livingston & Forbes, 2017; Mack et al., 2018; Tingle et al., 2014; Warner et al., 2013). Officials have indicated a lack of coaching (Livingston & Forbes, 2017), which is compounded by infrequent observations (Baldwin & Vallance, 2015, 2016a). Furthermore, limited observations and feedback adversely impact officials' performance and development (Dell et al., 2016). Due to the lack of feedback from coaches, there is a growing need for greater feedback regarding performance and development (Warner et al., 2013; Webb et al., 2018).

Receiving performance feedback positively influences officials' motivation and satisfaction (Cuskelly & Hoyer, 2004). Thus, if officials do not receive feedback regarding their performance, it could potentially be detrimental towards their continuation. A potential solution to this issue is for officiating organisations to develop and recruit more coaches (Baldwin & Vallance, 2016a), as continuing the status quo could have a dire impact upon retention. It is important to note that frequent evaluation and support of officials allows for skills and knowledge to develop (Bernal et al., 2012) and is of value (Baldwin & Vallance, 2016a). However, coaches in the system have not always provided a positive experience.

The coaches that officials have had contact with have been reported to be obnoxious (Baldwin & Vallance, 2016b). Dealing with obnoxious coaches meant that officials were not getting value out of the interactions with coaches. Officials have mentioned that they feel unfairly treated as some coaches may impede their progression to ensure the coaches hold a level of seniority over them (Sam et al., 2018). With a limited pool of coaches, these findings do not bode well for officiating organisations as the interactions, or lack of, between coaches and officials, detract from their experiences. It has also been found that coaching resources are targeted towards certain officials (Kellett & Warner, 2011).

Higher-ranked officials reported receiving more coaching (Baldwin & Vallance, 2016a). Officials who are identified as talented or are being pushed to advance quickly because of their age tend to receive more coaching or even given a dedicated coach (Cuskelly & Hoye, 2004). This is a worrying trend whereby officiating organisations tend to invest more resources into those identified as talented instead of evenly distributing resources across their membership. Thus, the number of quality coaching experiences officials receive is limited. Therefore, it is important to consider that access to coaching is an aspect of an official's experience which needs improvement. Whilst receiving coaching ensures that officials are suitably developed, rewarding officials is also an important consideration.

2.6.4 Rewards

Tangible rewards received by officials seldom break even with the costs incurred. Hence, within this study, two aspects of tangible rewards will be explored - material incentives and remuneration. Material incentives are defined as receiving fringe benefits such as reduced membership fees, financial assistance for further training, and reduced-price or even free entry to sport associated events (Schlesinger et al., 2013). Whereas, remuneration refers to financial payment for officiating sporting events (Ridinger, Kim, et al., 2017).

Payment of officials varies between sporting codes and geographical locations. Australian Rules Football in Australia, Ice Hockey in North America and Football in New Zealand are some examples of contexts in which officials are paid. It has been reported that remuneration indirectly correlates with job satisfaction and commitment (Kim, 2017). For officials under 30, remuneration explains continuation (Ridinger, 2015). Officials who receive remuneration have widely reported that it is insufficient (Auger et al., 2010; Forbes & Livingston, 2013; Kim, 2017) and not at expected levels (Auger et

al., 2010). Some officials have further mentioned that remuneration rates are unfair (S. Kim, 2017). Therefore, insufficient remuneration can lead to officials dropping out (Forbes & Livingston, 2013; Kim, 2017; Titlebaum et al., 2009). Furthermore, the expenses of officiating are a burden financially for some officials (Livingston & Forbes, 2017). These findings present a unique situation, where many officials have reported that the remuneration received is insufficient, yet it is a reason many younger officials return. However, it has been indicated that an increase in income can influence job satisfaction positively amongst officials (Gencay, 2011). In the

Within the rugby context in New Zealand, officiating organisations do not remunerate officials, similar to Netball in New Zealand (Sam et al., 2018). The perfection expected by other stakeholders within the sporting community if officials are paid (Livingston et al., 2017) could explain why this is the case. However, it has been found that remuneration is a motivator for new officials (Cuskelly & Hoyer, 2004; Kellett & Warner, 2011; Livingston et al., 2017; Livingston & Forbes, 2016; Ridinger, 2015; Warner et al., 2013). If an official's motivation decreases, the EM of earning extra money may influence their continuation. Therefore, it is pertinent that the perceptions towards remuneration are explored within this study.

Some volunteer management studies have discussed using material incentives to reward volunteers (e.g. Kotrou & Downward, 2015; Mykletun & Himanen, 2016; Park & Kim, 2013; Schlesinger et al., 2013; Wicker, 2017). However, to the best of our knowledge, no studies in top sport management journals explore the use of material incentives as rewards within the officiating literature. Yet this is a practice used within the context of this study. Rugby referees in New Zealand are generally offered early access tickets to international matches and sometimes offered complimentary tickets to Super Rugby and/or provincial matches. Therefore, this is an avenue this study will explore and contribute to the sport management and officiating literature. While it has been identified that sufficient rewards are important to officials. Another way officiating organisations can show their appreciation is through recognition.

2.6.5 Recognition

It is widely known that officiating is a thankless task which does not necessarily receive the recognition it deserves. Therefore, it is important to understand if this recognition is important to officials. In the context of officiating, recognition refers to the practice of publicly recognising officials' efforts, achievements and appointments (Livingston & Forbes, 2017). However, it seems that recognition is not at expected levels.

Lack of recognition is an issue for officiating organisations (Cuskelly & Hoye, 2004; Livingston & Forbes, 2017; Rainey & Hardy, 1999; Titlebaum et al., 2009). Recognition of officials could take many forms. This could include being presented with an award (Livingston & Forbes, 2017) or simply showing appreciation (Baldwin & Vallance, 2016a; Spor & Dergisi, 2017). These small tokens of appreciation are important for officials as it gives them positive praise. The lack of recognition from officiating organisations is concerning as this is a cost-efficient way of building morale, making officials feel appreciated and recognised (Baldwin & Vallance, 2016a). Officials have indicated that they have considered discontinuing due to a lack of recognition (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017). Whereas being recognised (Baldwin & Vallance, 2016a) gives officials satisfaction, especially being recognised and appreciated by their peers (Kellett & Warner, 2011). This highlights that the appreciation does not always need to come from administrators or leaders amongst officiating organisations.

The lack of literature pertaining to officials being recognised suggests there is a scholarly gap that needs to be filled. Social media pages of RRAs in New Zealand show that premier (highest grade of amateur club rugby) and elite (franchise, provincial and international) referees are constantly being recognised for their appointments. In contrast, limited posts refer to those in lower grades (Cuskelly & Hoye, 2004). In lieu of rewards, recognition of officials through awards or social media posts could be a cheap alternative that can also help create a community amongst officials. Therefore, understanding the impact of recognition on the continuation of rugby referees in New Zealand would provide practical insights for retention and further build the knowledge surrounding officials.

2.7 Sense of Community (SoC)

Feeling connected can have many benefits in multiple contexts. This is no different for officials. Having officials who are connected fosters a community feel supporting each other through adversity. SoC is a feeling of belonging, whereby

individuals believe they mean something to others within the group and have faith that the group's needs will be met through a commitment to others (McMillan & Chavis, 1986). SoC has been used to understand the way communities come together. A community can be defined as a geographical setting, neighbourhood or group which has come together for a purpose (Gusfield, 1975; Heller, 1989). Those who perceive their neighbourhood as a small community within a city often feel a sense of loyalty (McMillan & Chavis, 1986). Importantly, SoC has been found to be an indicator of retention amongst seasonal workers (McCole, 2015), a context which has similarity to officials as they are not engaged year-round.

In sport, SoC can be fostered through common social spaces, camaraderie, purpose (Warner & Dixon, 2011), shared interests (Kerwin et al., 2015) and an affinity to the sport (Ridinger, 2015). Amongst officials, SoC can be expressed as the support received from others (Livingston & Forbes, 2017; Nordstrom et al., 2016; Parsons & Bairner, 2015; Ridinger, 2015). Creating common spaces for officials is challenging as rugby referees do not generally have a common social space to congregate at following matches. This likely inhibits the development of SoC. SoC can also be inhibited by the presence of cliques.

Unfortunately, officials have reported that there are cliques and inequities amongst subgroups impeding the development of a SoC (Kellett & Warner, 2011; Warner et al., 2013). Meaning there are strong bonds between sub-groups of officials, such as by age, experience or level of competence (Baldwin & Vallance, 2016a; Kellett & Warner, 2011; Ridinger, 2015; Warner et al., 2013). Leaving others to feel like they are on the outer. Thus, if a new official is unable to socialise with the others (Kellett & Shilbury, 2007) or is unable to fit in, it leaves them feeling isolated (Dosseville et al., 2013). Older officials report higher levels of camaraderie with other officials, whereas novice officials have not had the opportunity to feel a SoC (Ridinger, 2015). These studies highlight that fostering an environment where everyone feels included positively impacts the officiating organisation on multiple levels. Unfortunately, in male-dominated sports, females have not often experienced SoC.

Evidence suggests that female officials are treated differently than their male counterparts. Female officials have indicated difficulties creating relationships with others (Baldwin & Vallance, 2016b), leading to them feeling a lack of a community (M. C. Kim & Hong, 2016). Females in male-dominated sports are more likely to be minorities and become isolated, leading to difficulties creating relationships with their male counterparts (Baldwin & Vallance, 2016b). Female officials expand further by

expressing that they have to make an effort to navigate and figure out the old boy's network (Nordstrom et al., 2016) by having to prove themselves to their peers through their knowledge to gain acceptance (Baldwin & Vallance, 2016b; A. Forbes et al., 2015). Female-only initiatives which are being implemented for players and coaches could be explored within officiating too. This would create a safe, welcoming and known environment whereby female officials could connect with someone who understands their struggles (M. C. Kim & Hong, 2016; Nordstrom et al., 2016). Fostering a SoC is important to ensure that female officials have a positive officiating experience (Nordstrom et al., 2016). It is well documented that having a SoC has a positive relationship with retention and satisfaction (Bernal et al., 2012; Cuskelly & Hoye, 2004; Kellett & Shilbury, 2007; Kellett & Warner, 2011; Warner et al., 2013), and the lack of a SoC can lead to discontinuation, especially amongst female officials (Tingle et al., 2014). Therefore, understanding ways in which SoC can be fostered is relevant.

A SoC can be fostered in many ways. One way in SoC can be fostered is through an informal mentoring system (Ridinger, 2015; Warner et al., 2013) or social support systems (Cuskelly & Hoye, 2004, 2013; Wolfson & Neave, 2007). Having support from others helps officials to develop confidence and self-esteem (Livingston & Forbes, 2017) and aids retention (Cuskelly & Hoye, 2013). An example of SoC aiding retention is how it can support officials who may have negative experiences.

Officials are sometimes alone during matches (Auger et al., 2010; Cuskelly & Hoye, 2004; Doan & Smith, 2018; Kellett & Shilbury, 2007; Kellett & Warner, 2011; Livingston & Forbes, 2017; Nazarudin et al., 2009; Ridinger, Kim, et al., 2017; Titlebaum et al., 2009; Warner et al., 2013; Webb et al., 2017). Therefore, it is important to have a support system of friends and colleagues to navigate any issues that may arise (Livingston & Forbes, 2017; Parsons & Bairner, 2015; Ridinger, 2015). Fostering a SoC can act as a support system for dealing with abuse (Kellett & Shilbury, 2007).

Fostering a SoC amongst officials has many positive outcomes, yet research indicates a lack of SoC. Practically this is worrying considering SoC was rated as more important than monetary rewards by experienced Australian Rules umpires (Kellett & Warner, 2011). In lieu of informal support systems, the support an official receives from their officiating organisation greatly impacts their experiences. The relationships built with peers, camaraderie and peer support positively influence continuation (Baldwin & Vallance, 2016a; Bernal et al., 2012; Ridinger, 2015), whereas, a lack of an officiating community can lead to attrition (Kellett & Shilbury, 2007; Tingle et al., 2014; Warner et al., 2013).

2.8 Abuse of Officials

Increasingly, media attention has focussed on the abuse of match officials by stakeholders. Furthermore, Kellett and Shilbury (2007) claim that society has constructed officials as villains. Due to this social construction, officials are more likely to receive abuse than anyone else in organised sport (Balch & Scott, 2007).

The level of abuse officials receive on game day would not be tolerated in society or any workforce (Cleland et al., 2017), yet, it is expected and accepted by officials (Cleland et al., 2017; Forbes, Edwards, & Fleming, 2015; Forbes & Livingston, 2013; Livingston et al., 2017; Parsons & Bairner, 2015; Rayner et al., 2016; Ridinger, 2015; Walters et al., 2016; Webb et al., 2018; Wolfson & Neave, 2007). The abuse of officials at an amateur level can be explained due to the heavy scrutiny placed upon elite officials emulated at the grassroots level (Elliott & Drummond, 2013). However, others mention that the leniency shown by elite officials towards poor behaviour leads to the abuse of officials in grassroots football (Cleland et al., 2017; Elliott & Drummond, 2013). Ignoring this abuse signals to others that abuse of officials is accepted. Ultimately, abuse negatively influences continuation (Dawson et al., 2021; Dell et al., 2016; Dosseville et al., 2013; S. L. Forbes & Livingston, 2013; Jacobs et al., 2020; Livingston et al., 2017; Rayner et al., 2016; Webb, Rayner, et al., 2019; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019) and detracts from their enjoyment (Warner et al., 2013).

Evidence suggests that the abuse experienced by officials could be due to the abuser's lack of knowledge of the rules of the sport (Friman et al., 2004; Wolfson & Neave, 2007). For new and prospective officials, perceptions of the abuse they might be subjected to have been reported as a deterrent (Cuskelly & Hoyer, 2004). One of the common forms of abuse experienced by officials is verbal.

2.8.1 Verbal Abuse

Officials have indicated that they had experienced verbal abuse (Dell et al., 2016; Dorsch & Paskevich, 2007; Dosseville et al., 2013; Folkesson et al., 2002; A. Forbes et al., 2015; Furst, 1991; Livingston & Forbes, 2016; Nazarudin et al., 2009; Rayner et al., 2016; Walters et al., 2016; Warner et al., 2013; Webb et al., 2017, 2018; Wolfson & Neave, 2007; Zelyurt & Atacocugu, 2017). Unsurprisingly, inexperienced officials are more likely to be verbally abused (Rayner et al., 2016; Webb et al., 2017, 2018). Unfortunately, this puts new or inexperienced officials under more pressure to perform. While officials are generally exposed to more frequent abuse, they are regular people. They do not necessarily have the characteristics predisposing them to deal with abuse,

especially verbal abuse (Balch & Scott, 2007). However, others have explained their perceptions of abuse.

Interestingly, a professional Australian Rules umpire explained that when spectators pay for matches, their tickets give them the right to abuse officials. Whereas an amateur Australian Rules umpire had a similar view by explaining that he expects to be able to abuse officials when he attends elite matches (Kellett & Shilbury, 2007). These findings further highlight that abuse of officials is accepted as part of the fabric of sport. Especially when the notion is supported by those who are often the recipients. Within the Australian Rules context, it has been reported that officials' decisions are generally applauded by approximately 50% of spectators and challenged by the remaining 50% (Gill, 2011), which supports the anecdotal notion that officials will never please everyone. However, some officials may have the necessary skills to navigate and deal with the abuse directed towards them.

Interestingly, a mixture of professional, semi-professional and amateur Australian Rules umpires dealt with abuse similarly. They described it as water off a duck's back. Others mentioned blocking out or ignoring the abuse directed towards them (Kellett & Shilbury, 2007). The impact of abuse on grassroots officials is worrisome from a practical perspective. Being subjected to abuse has adverse effects on an official's experience as it has been identified as being a stressor (Baldwin, 2013b; Dell et al., 2016; Titlebaum et al., 2009) and a source of anxiety (Baldwin, 2013b; Dell et al., 2016), ultimately leading to dropout (Cuskelly & Hoye, 2004; Dell et al., 2016; Dosseville et al., 2013; Forbes & Livingston, 2013; Livingston et al., 2017; Warner et al., 2013; Wolfson & Neave, 2007). While much of the verbal abuse is generic or personal. Officials from minority communities are abused on a deeper personal level.

Other forms of verbal abuse towards officials include; sexism (Baldwin & Vallance, 2016b; A. Forbes et al., 2015; Friman et al., 2004; Nordstrom et al., 2016; Rayner et al., 2016; Schaeperkoetter, 2017), homophobic (Webb et al., 2018) and racial abuse (Rayner et al., 2016). New Zealand, the context of this study, is not immune from racial abuse of officials within rugby (Ali, 2018). Women, especially in male-dominated sports such as rugby union, basketball and football, believe they are the targets of abuse because the abusers deem that being an official within the sport is not within their realm (Baldwin & Vallance, 2016b; A. Forbes et al., 2015; Friman et al., 2004; Nordstrom et al., 2016; Rayner et al., 2016; Schaeperkoetter, 2017). Some female officials have chosen to ignore the sexist abuse they have experienced to downplay gender differences within their sport. In contrast, only one study has indicated the prevalence of racial abuse

(Rayner et al., 2016) and homophobic abuse (Webb et al., 2018) experienced by officials. However, with sports organisations looking to increase the diversity of their memberships, it is possible that racial and homophobic abuse may increase as the diversity increases. Therefore, different methods should be employed to nullify abuse, especially of minority communities. The literature indicates that abuse is a growing issue that can negatively impact officials' experiences. Therefore, exploring it within the context of this study will provide new and nuanced insights regarding the impact of abuse. While the retention of officials has been identified as complex (Auger et al., 2010), it is important to consider what influences the continuation of officials.

2.9 Intention to Continue

Facilitating an environment where officials continue in their role is a central focus for managers across all sports. An officials stated intention to carry on in their role is, therefore, a vital metric to better understand. An intention is "a measure of the likelihood that a person will engage in a given behaviour [which] may be termed behavioural intention" (Ajzen & Fishbein, 1980, p. 5). The value of the construct has been established across numerous contexts because it can effectively predict behaviour (VanYperen, 1998). Actual behaviours are the most accurate measure of continuation, but ITC serves as a useful proxy, including in the context of volunteers (May Kim et al., 2009). ITC is a central construct across a breadth of officiating research (Cuskelly & Hoye, 2013; Giel & Breuer, 2020; Ridinger, Kim, et al., 2017).

There are several factors which impact an officials ITC. These include; motivations (e.g. Giel & Breuer, 2019; Hancock et al., 2015; Livingston & Forbes, 2017, 2016; Livingston et al., 2017), POS (e.g. Choi & Chiu, 2017; Cuskelly & Hoye, 2013; Giel & Breuer, 2019; Kim, 2017; Livingston & Forbes, 2016; Livingston et al., 2017), OC (e.g. C. E. Gray & Wilson, 2008), RC (e.g. Barnhill et al., 2018), other organisational factors (e.g. Cuskelly & Hoye, 2013; S. L. Forbes & Livingston, 2013; Hancock et al., 2015; S. Kim, 2017; Livingston et al., 2017; Parsons & Bairner, 2015; Ridinger, Kim, et al., 2017; Warner et al., 2013), abuse (e.g. Dawson et al., 2021; Dell et al., 2016; Dosseville et al., 2013; S. L. Forbes & Livingston, 2013; Jacobs et al., 2020; Livingston et al., 2017; Rayner et al., 2016; Webb, Rayner, et al., 2019; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019) and SoC (e.g. Baldwin & Vallance, 2016a; Bernal et al., 2012; Ridinger, 2015). Therefore, ITC is an appropriate construct to feature as the primary outcome variable in an exploration of the officiating experience.

2.10 Research Questions

This study aims to generate insights in order to foster quality experiences for ECRs. To this end, a series of studies are organised around five research questions which are presented and justified next. In doing so, a synthesis of the above literature review is provided, specific to each research question.

It has been found that motivations are related to officials' ITC (Auger et al., 2010; Bernal et al., 2012; Fowler et al., 2019; Hancock et al., 2015; Livingston & Forbes, 2017, 2016; Symonds & Russell, 2018). Therefore, there is an opportunity to add to the literature by exploring the relationship between motivational dimensions and intention to continue within the New Zealand rugby context.

RQ1: What motivation dimensions (intrinsic, extrinsic, sport-related, social, or role-specific) influence early career rugby referees in New Zealand to begin and continue refereeing?

Furthermore, this study is the first to explore the role of POS, RC, and OC upon the well-explored relationship between motivations and ITC within the New Zealand rugby refereeing context. Specifically, more work is needed in follow-up to the finding that motives alone are a weak predictor of intention to continue (Hoye et al., 2008).

RQ2: How are perceived organisation support, organisational commitment and role commitment related to motivations of officials and their intention to continue?

There is a clear opportunity to better understand the role of POS, OC, and RC within the officiating experience, but other factors relating to officiating organisations should also be explored. Studies have found that organisational factors such as administrator considerations (Cuskelly & Hoye, 2004, 2013; S. L. Forbes & Livingston, 2013; Parsons & Bairner, 2015; Warner et al., 2013), continued education (Ridinger, Kim, et al., 2017), access to coaching (Baldwin & Vallance, 2016a), rewards (Forbes & Livingston, 2013; Kim, 2017; Titlebaum et al., 2009) and recognition (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017) all have a relationship with intention to continue. These initial findings should be explored further in an alternate context.

RQ 3: What organisational factors are related to the continuation of early-career rugby referees in New Zealand?

Abuse has been found to influence continuation negatively (Dawson et al., 2021; Dell et al., 2016; Dosseville et al., 2013; S. L. Forbes & Livingston, 2013; Jacobs et al., 2020; Livingston et al., 2017; Rayner et al., 2016; Webb, Rayner, et al., 2019; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019). However, as SoC increases, the likelihood of an official continuing increase (Baldwin & Vallance, 2016a; Bernal et al., 2012; Ridinger, 2015). Kellett and Shilbury (2007) mention that SoC within officiating organisations has been found to help officials manage and deal with abuse. Therefore, within a comprehensive series of studies exploring the officiating experience, it is appropriate to assess the intervening influence of SoC on the well-established and troubling abuse-ITC relationship.

RQ 4: How does a sense of community affect the relationship between abuse of officials and their intention to continue?

All in all, it is vital to understand which organisational factors contribute towards a quality experience for early-career rugby referees. Doing so will not only help to address the shortage of officials for the benefit of the game but may also create better experiences for a critical group of participants within sport. With the key constructs of interest having been explicitly considered through RQ1-4, it is appropriate to now broaden the focus and consider a 5th research question. With broader scope and requiring more of an open-ended design, officials should be presented the opportunity to reflect on and articulate their perceptions of the organisations they are connected to.

RQ 5: How do early-career rugby referees perceive organisational influence contributes towards a quality experience?

Chapter 3 - Methods

The preceding chapters introduced the project and provided an overview of the literature. Chapter 3 is an outline of the methods utilised within this project, as well as the principles and philosophy that have shaped it. The research paradigm and design are covered first. The method for each of the three studies is then explained. This includes researcher access, participants, and data analysis.

3.1 Research Paradigm

This project is influenced by pragmatism as a research paradigm. Pragmatism is a philosophical belief that achieves authentic knowledge by exploring the alignment of truth and utility (Ormerod, 2006). Pragmatism is a problem-centred nature of inquiry (Denscombe, 2008). Philosophically, a pragmatic approach accepts that there are singular and multiple realities, which allows for empirical investigations. Therefore, a pragmatic approach orients toward solving real-world, practical problems (Feilzer, 2010). This approach allows for the construction of knowledge based on the reality of the world we experience (Johnson & Onwuegbuzie, 2004).

Pragmatism as a research paradigm aligns with a multimethod approach, as it can encompass diverse approaches to explore a phenomenon, all the while focusing on the research problem (Creswell & Plano Clark, 2018; Johnson et al., 2007; Johnson & Onwuegbuzie, 2004; Teddlie & Tashakkori, 2009). A combination of methods best suits a pragmatic philosophy for exploring research questions as it most effectively examines the natural world while incorporating human perspectives through interactions and understanding of “what works” (Johnson & Onwuegbuzie, 2004).

Within the body of sport management literature, pragmatic philosophical approaches are becoming more common (e.g., Sherry et al., 2017), and there appears to be very good alignment. Employing a pragmatic approach helps to solve real-world issues while highlighting the importance of evaluating findings based on moral, social, and practical consequences along with its effect on human condition. Due to its practical and applied nature, this project exploring the experiences of early-career rugby referees aligns well with a pragmatic approach.

This project is uniquely suited to pragmatism because the three studies feature personal accounts and lived experiences of early-career rugby referees. Furthermore, pragmatism is appropriate for this project because it lends itself to different types of knowledge, which are tools that help people to cope and thrive in the environment (Rorty,

1990). This project entails early-career rugby referees recounting and reflecting on their experience in the wider rugby environment, specifically focusing on Rugby Referee Associations (RRAs).

Overall, the use of the pragmatic approach is appropriate for the project as it is a practical and outcome-oriented method of inquiry. Here, the outcomes are of benefit to RRAs, and others involved with managing sport officials. Thus, pragmatism will facilitate an understanding of the experience of early career rugby referees and, specifically, their continuation decision.

3.2 Research Design

Multimethod research involves the use of two or more research methods within one project (Creswell, 2015; Hunter & Brewer, 2015; Morse, 2003; Schwandt & Lichty, 2015). This project has used a multimethod approach because different research methods will be used across the three studies to provide a more robust understanding of the experiences of early career rugby referees in New Zealand. The data from each of the three studies is complementary among themselves, as well as alongside what has already been captured in previous studies (Schwandt & Lichty, 2015). Furthermore, this research consists of two or more interrelated studies which are complete within themselves (Morse, 2003). Confirming the use of a multimethod approach.

A key element of the multimethod research design is that when different methods are used in sequence or in parallel but are not integrated until the point when inferences are made (Anguera et al., 2018; Johnson et al., 2007). Furthermore, in a multimethod design interpretations are formed from the combined strengths of the sets of data to explore a research problem (Creswell, 2015). As outlined further below, this study will bring together the findings from each of the three studies to meet the aim of the research while each study will explore relevant research questions. Furthermore, previous studies of officials have almost exclusively examined commitment and perceived organisational support using quantitative designs, so the qualitative design undertaken here will complement what has been done previously.

Study 1 of this project includes referee data collected by NZR. These data are from annual referee registration and surveys from 2010-2019. It is both numeric and textual. Study 2 involved referees completing a questionnaire with mostly scaled items upon the completion of the rugby season in 2020. In Study 3, data was collected via interviews in 2021. Figure 2 is a visual representation of the three studies within this project.

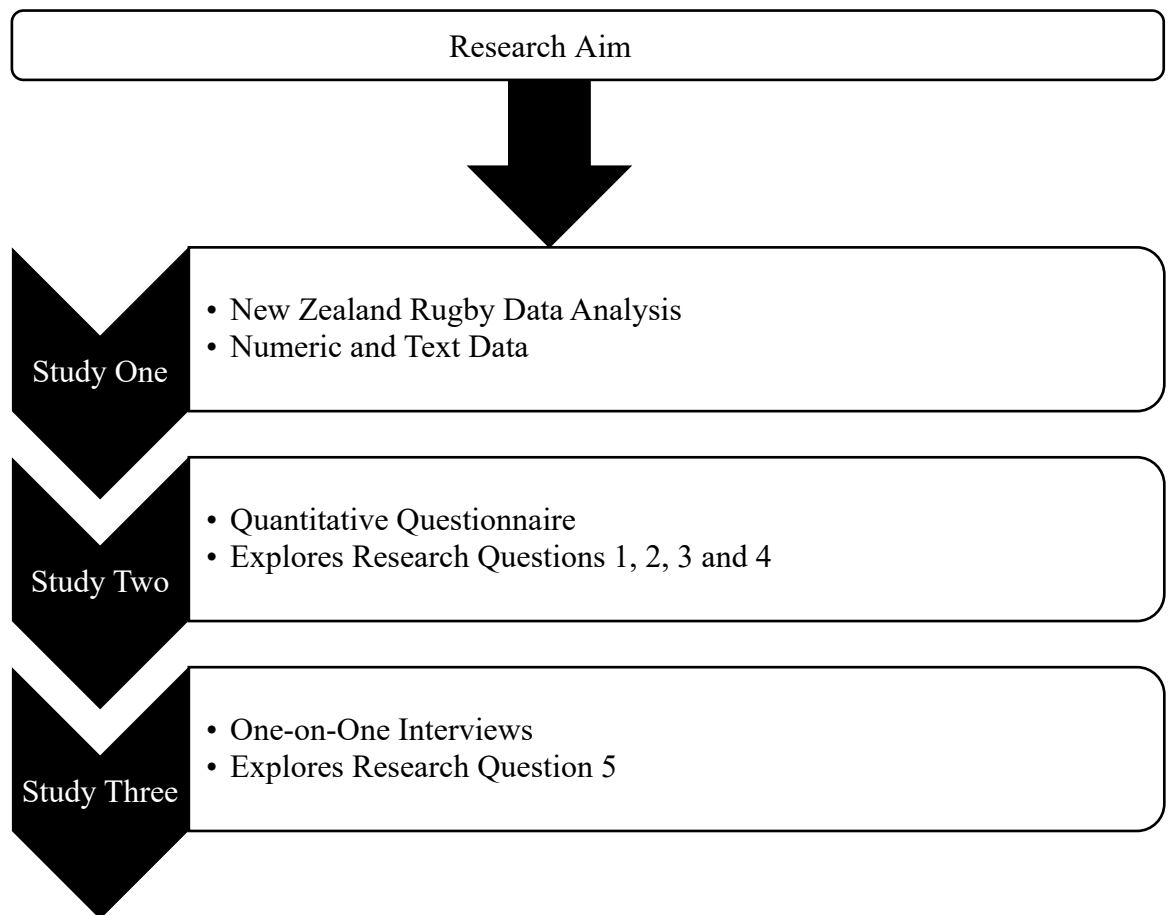


Figure 2 - Project Design
Project Design

3.3 Study 1 - New Zealand Rugby Data

The methods used in Study 1 are outlined in the following sections, while results are provided in Chapter 4. New Zealand Rugby (NZR), a key partner for this project, had referee data that was rich and valuable but had not yet even been sorted, let alone analysed or reported on. Ultimately registration data from 2010-2019 was made available, along with end-of-season survey data from 2013-2017 and 2019.

Referee survey data from 2013-2017 and 2019 contained a mixture of multi-choice and open-text questions. Surveys conducted from 2013-2017 had several similar variables. However, the 2019 survey was markedly different. Table 1 outlines the variables across the six surveys. Likert-style items were measured on a 5-point scale from (1) strongly disagree to (5) strongly disagree.

Table 1 - NZR Referee Survey Variables*NZR Referee Survey Variables*

Variables	Variable Type	2013	2014	2015	2016	2017	2019	Combined
Responses		373	435	633	425	553	252	2671
Age	Multi Choice						x	
Gender	Multi Choice					x	x	
Ethnicity	Multi Choice						x	
Provincial union	Multi Choice	x	x	x	x	x	x	x
Age grades refereed	Multi Choice	x	x	x	x	x	x	x
Length of time refereed	Multi Choice	x	x	x	x	x	x	x
Intention to continue	Multi Choice	x	x	x	x	x	x	x
Intention to continue	Open Text	x	x	x	x	x	x	
Refereeing satisfaction	Likert Style	x	x	x	x	x	x	x
Refereeing satisfaction	Open Text	x	x	x	x	x	x	
Refereeing environment (5 items)	Likert Style	x	x	x	x	x		x
Refereeing environment	Open Text	x	x	x	x	x		
Training and support satisfaction (3 items)	Likert Style	x	x	x	x	x		x
Training and support satisfaction	Open Text	x	x	x	x	x		
Rugby Smart attendance	Multi Choice	x	x	x	x	x		x
Rugby Smart satisfaction (5 items)	Likert Style	x	x	x	x	x		x
Rugby Smart satisfaction	Open Text	x	x	x	x	x		
NZR and provincial union communication (5 items)	Likert Style	x	x	x	x	x		x
NZR and provincial union communication	Open Text	x	x	x	x	x		
Preference of information type	Multi Choice	x	x	x	x	x		x
Preference of information type	Open Text	x	x	x	x	x		
Other comments	Open Text	x	x	x	x	x		
Aspects of refereeing enjoyed	Open Text		x	x	x	x		
Aspects of refereeing enjoyed least	Open Text		x	x	x	x		
Awareness of new playing time law	Multi Choice		x					

Variables	Variable Type	2013	2014	2015	2016	2017	2019	Combined
Awareness of new default law	Multi Choice		x					
Recommend refereeing to others	Multi Choice						x	
Motivation to referee	Open Text						x	
Why peers don't volunteer in rugby	Open Text						x	
Awareness of volunteer appreciation programmes (4 items)	Multi Choice						x	
Best way to recognise/reward officials	Open Text						x	
Support (3 items)	Likert Style						x	
Type of referee	Multi Choice						x	
Value of provincial union training nights	Likert Style						x	
Courses attended	Multi Choice						x	
Awareness and value of GROW model	Likert Style						x	
Awareness and usefulness of resources (12 items)	Likert Style						x	
Communication channels followed/subscribed to (3 items)	Multi Choice						x	
First language	Multi Choice						x	
Physical injuries or disabilities	Multi Choice						x	
Work type	Multi Choice						x	

Note: x denotes that this variable was present in the corresponding years' survey

Multiple data analysis processes were implemented as the NZR data was a mixture of numeric and open-text data. The registration data was provided in a single Microsoft Excel spreadsheet. In the first instance, data was split into individual years to allow for year-on-year analysis. After splitting the data, the registration information was coded for analysis using Statistical Package for Social Sciences (SPSS) version 26. Once the data was coded, frequencies were generated for each year.

For the end-of-season surveys, data for each survey was provided in separate Microsoft Excel files. Each survey had a mixture of numeric and open-text data. In the first instance, all quantitative information was coded for analysis using SPSS. Frequencies and descriptives were generated for each relevant variable. Further analyses included *t*-tests. Open-text responses for early-career referees were extracted. These were thematically analysed based on the recommendations of Braun and Clarke (2006). This included familiarising with the data by reading and organising it, generating initial codes, searching for themes, reviewing themes, defining, and naming themes and reporting. As a result of this process, four themes were presented.

3.4 Study 2 - Questionnaire

The methods used in Study 2 are outlined in the following sections, while results are provided in Chapter 5. This study took the form of an online survey in which the entire population of New Zealand's rugby referees were invited to participate. In addition to the opportunity to access a large sample online, questionnaires can also reach individuals who may not otherwise be forthcoming and seek anonymity. Another important benefit is that participants can complete a questionnaire when the time suits, thereby creating less time pressure (Manfreda & Vehovar, 2008).

3.4.1 Pilot Study

A literature review highlighted that two aspects important to the officiating experience had only been addressed in qualitative studies. Therefore, items were created and tested in the pilot questionnaire—the items measured role-specific motivation and access to coaching. The items for role-specific motivation were derived from the findings of Ridinger (2015), Schaeperkoetter (2017), and Baldwin (2013a). The three studies highlighted that a degree of motivation for referees is specifically linked to aspects within the role. These drivers included the flexibility of choosing when to participate in contrast to a season-long commitment as a player, the feeling of officiating being more comparable to that of playing in comparison to other non-playing roles and the impact of

not being able to compete in the sport physically. For access coaching – a facet within the broader collection of “other organisational factors” – items were developed from Livingston and Forbes (2017), Mack et al. (2018), Tingle et al. (2014) and Warner et al. (2013). These items focus on the frequency of one-on-one coaching officials may receive.

The scale development process of DeVellis (2017) was followed to explore the new items. Initially, with the support of supervisors, a pool of items was developed. The research team had appropriate expertise for this process, given the lead researcher is a current rugby referee in New Zealand. There was also substantial officiating expertise among the supervision team that helped inform various decisions through the scale development process. As other items in this project were measured on a 7-point Likert scale, from 1 (*strongly disagree*) to 7 (*strongly agree*), it was decided these items would be too.

DeVellis (2017) recommends that the pool of items are to be reviewed by experts. Two scholars currently researching match-officials were selected as the experts for feedback. Both experts were sent an email introducing the project and requested input for establishing the content and face validity of the items for each dimension. The experts were asked whether the items accurately reflected what they intended to measure. Feedback indicated that the wording of the items should be considered. This feedback was considered, and minor wording amendments were made. Next, the items were administered to a sample (DeVellis, 2017). A field test was conducted via an online questionnaire using Qualtrics. The pilot questionnaire included demographics (age and level of refereeing), the three items for each dimension and an open-ended question following the items for each dimension asking if the items were understandable and relevant in their role as a rugby referee. 102 responses were received (Table 1). DeVellis (2017) recommends that a pilot sample of this size and representativeness is enough to eliminate subject variance.

The participants for the pilot questionnaire included members of two of New Zealand’s RRAs. In 2019, these two associations, based in the greater Auckland region, accounted for 15% of all registered active rugby referees. The two RRAs had a combined membership of 278, so more than 1/3 of referees from the two RRAs participated in the pilot study. An email invitation was sent to the administrators of each association to send on to their members. The mean age for the pilot questionnaire respondents was 47.64 years old. All but nine respondents had been refereeing for more than a year.

Of the new Role Specific Motivation items (Table 2), the item which created most confusion was, “*I am a rugby referee because my engagement is flexible*”, with

respondents asking for more clarity around the term flexibility. With this in mind, the item was amended to “*I am a rugby referee because of the flexibility to choose when I am involved.*” It was decided that wording better conveyed that officials can choose when they participate, in contrast to the commitment of a player or coach, which is less flexible.

Table 2 - Role Specific Motivation

Role Specific Motivation

Item	<i>n</i>	<i>M</i>	<i>SD</i>
I am a rugby referee because my engagement is flexible	102	4.80	1.50
I am a rugby referee because the feelings are similar to playing	102	5.06	1.36
I am a rugby referee because I’m more physically suited to this role than playing	102	4.96	1.83

Most open text responses indicated that respondents found the new Access to Coaching items (Table 3) relevant and relatable to their refereeing experience. However, some responses suggested creating more clarity by referring to personal coaching. This clarity ensures that coaching is not confused with education which is also referred to as group coaching. Therefore, the three items were reworded to *I receive one-on-one coaching frequently*, *I would like more one-on-one referee coaching*, and *I receive sufficient one-on-one coaching*.

Table 3 – Access to Coaching

Access to Coaching

Item	<i>n</i>	<i>M</i>	<i>SD</i>
I received coaching/mentoring frequently	100	4.28	1.99
I would have liked more referee coaching/mentoring	100	4.62	1.57
I have received sufficient coaching/mentoring on my refereeing	100	4.42	1.67

Across both sets of items, the mean scores were relatively neutral and near four (4.28-5.06) on the 7-point scale, which is an indication the items were worded effectively (DeVellis, 2017).

3.4.2 Main Study

For the main study, the full online questionnaire, including the piloted items, was disseminated to active rugby referees in New Zealand.

3.4.2.1 Researcher Access. The industry partner, NZR, facilitated access to rugby referees registered to all 26 provincial unions. In the first instance, an email was sent by NZR to all active rugby referees from the 2020 season. The week following, an email

from the NZR Participation Development Manager to key contacts in the 26 provincial unions asking if they could send a reminder out via email and/or social media.

3.4.2.2 Instrumentation. On the understanding that the experiences of Early Career Referees (ECRs) are multifaceted (Ridinger, Kim, et al., 2017), several constructs were included in the questionnaire, each requiring numerous items to capture. All items measuring the constructs of interest in this study were measured on a 7-point Likert scale anchored by *strongly disagree* (1) and *strongly agree* (7). A complete list of items can be found in Appendix C. Aside from the six items piloted and described in a previous section. All other items had been used and validated in previous research, which provides a basis that the items were used in the current study reliably (Boynton & Greenhalgh, 2004).

The following demographic variables were included in the survey: gender, month of birth, age, ethnicity, relationship status, highest academic achievement, main occupation, their rugby referees association, age grades they referee, length of time as a referee, average matches refereed per week, whether they are currently playing rugby, and previous experience playing rugby – and to what level. In addition, referees were asked to confirm that they were active during the previous season. This data allows analysis of sub-groups within the population (Carmichael, 2016) and explore group differences on the constructs of interest.

In total, 43 items were used to measure the motivation of referees. The 43 items were across five dimensions of motivation. These included intrinsic, extrinsic, sport-related, social, and role-specific motivations. Intrinsic, extrinsic, sport-related, and social motivation were taken from the study of Auger et al. (2010). Through the literature review process, it was also identified that there are factors specific to officiating that drive participation. Hence, three items were developed and piloted for use in Study 2, as was described in a previous section of this chapter. The onset and continuing motivation items were prefaced with “*I became a rugby referee in order to*” and “*I am a rugby referee because*” (Hancock et al., 2015) but were otherwise identical. Twelve motivation scale variations are utilised in the analyses. Five of those scales are the full motivation dimensions: IM ($\alpha=.86$), EM ($\alpha=.82$), SRM ($\alpha=.81$), SM ($\alpha=.82$), and RSM ($\alpha=.40$). Seven subscales capture the onset (O) and continuing (C) motivation items for each dimension: OIM ($\alpha=.77$), CIM ($\alpha=.80$), OEM ($\alpha=.79$), CEM ($\alpha=.70$), OSRM ($\alpha=.82$), OSM ($\alpha=.76$), CSM ($\alpha=.66$). A subscale for continuing sport-related motivation (CSRM) was not included in the analyses as the internal reliability of these items was poor ($\alpha=.41$), despite the onset and continuing items performing reliably in its full form as SRM. RSM was also not included in further analyses for this reason.

Perceived organisational support was measured using seven items ($\alpha=.92$). The items were drawn from the study of Cuskelly and Hoye (2013). They were, in turn, guided by the work of Eisenberger and Huntington (1986). Seven items from Mowday et al. (1982) were used to measure the three aspects of organisational commitment - affective ($\alpha=.68$), normative ($\alpha=.76$), and continuance ($\alpha=.55$). Eight items from Blau (1985) were used to measure the three aspects of organisational commitment - affective ($\alpha=.54$), normative ($\alpha=.84$), and continuance ($\alpha=.05$). Due to the low reliability of the continuance component, it was not included in further analyses.

Other organisational factors were also explored: (i) perceptions of administrators ($\alpha=.89$; Ridinger et al., 2017), (ii) continuing education ($\alpha=.85$; Ridinger et al., 2017), (iii) access to coaching ($\alpha=.77$), (iv) rewards – including material incentives ($\alpha=.60$; Schlesinger et al., 2013) and remuneration ($\alpha=.76$; Ridinger et al., 2017), and (v) recognition ($\alpha=.76$; Kim et al., 2007). In total, 21 items were used to measure the five other aspects of the referee experiences relating to RRAs. Item two, '*I would have liked more referee coaching/mentoring*', was dropped when developing composite variables for the access to coaching dimension as it did not correlate strongly with the other items. Sense of Community was measured using three items ($\alpha=.88$) that were part of the Referee Retention Scale (Ridinger, Kim, et al., 2017).

Three referee abuse items ($\alpha=.83$) were drawn from the Referee Retention scale (Ridinger et al., 2017). Three intention to continue were derived from Cuskelly and Hoye (2013; $\alpha=.93$).

3.4.2.3 Participants. A total of 1543 active referees from across New Zealand were invited to participate via an email from New Zealand Rugby. The final usable sample was 320, with a response rate of 20.7%. Of the 320 respondents, 123 were early-career referees.

3.4.2.4 Data Analysis. Descriptive statistics, including frequencies, mean scores and standard deviations, were calculated for each construct using The Statistical Package for Social Sciences (SPSS). Data was analysed for the full sample and also separately for SRs (those with more than five years experience) and ECRs (those with five years or less experience). The full sample was explored to understand the entire referee cohort. Independent means *t*-tests were used to explore group differences by tenure (seasoned or early-career) for all constructs.

Prior to a series of Binary Logistic Regression analyses, composite variables were calculated, which are helpful in reaching general conclusions (Grace & Bollen, 2008). Scores for items from each construct were summed and then divided by the number of

items in each construct. The outcome variable (Intention to Continue) was re-coded from a 7-point Likert scale to a binary scale (yes/no). To achieve this, the distribution of responses for the ITC1, ITC2 and ITC3 items were analysed. The results were highly skewed, with 76.2% of respondents responding to the item with a six or seven. Therefore, responses that were less than six were recoded to 'No' and those responding with six or more were recoded to 'Yes'. This was decided because the researcher characterised those responding with six or higher as much more likely to continue in contrast to those responding less than six who are in effect much less likely to continue.

To analyse relationships among the constructs of interest, a series of binary logistic regression analyses were deemed appropriate (Pallant, 2016). Initially, univariate analyses were conducted to establish direct effects of the motivation dimensions, POS, OC, RC, other organisational factors, SoC and abuse on ITC. Variables with a *p*-value less than 0.2 in the univariate analyses were included in subsequent multivariable analyses (Bursac et al., 2008). This purposeful variable selection ensured that any pertinent and potentially predictive variables were examined. Subsequent multivariable analyses identified dimensions driving ITC while controlling for others. The moderating effect of POS, RC, and OC on the motivation-ITC and SoC on the abuse-ITC relationship was assessed by specifying an interaction term between the variables of interest.

3.5 Study 3 - Interviews

The methods used in Study 3 are outlined in the following sections, while results are provided in Chapter 6. Interviews with ECRs were conducted to gain insight into their experiences in New Zealand's rugby community. Interviews are the most commonly used data collection method for exploring underlying psychology in sport (Gratton & Jones, 2010). Using interviews allows the researcher to explore a phenomenon from the participant's perspective as much as possible, as they articulate their experiences in their own words. This study used a semi-structured interview format, allowing the researcher to keep the participants on topic. This enabled the researcher to ensure only relevant information was captured and provided the researcher with the scope to pursue a conversation thread more deeply. Semi-structured interviews provide more information and richer data in comparison to a survey (Tracy, 2013; Turner III, 2010). The purpose of the interviews was to gain a deeper understanding of the concepts explored in Study 2.

Interviews were conducted using multiple approaches due to the geographical dispersion of the participants. A single telephone interview was conducted with one participant, whereas nine were done face to face, and the remaining eight interviews were

done online using Zoom. Interview protocols were developed and did not differ regardless of method used to conduct the interview. All interview participants began with basic demographic questions, as gathering demographic data creates an opportunity for rapport to be built between the participant and the researcher (D. Gray, 2009).

In all instances, interviews were recorded on two separate audio devices in case of device failure (Ritchie et al., 2014). Following the interviews, the transcription process began as soon as possible.

3.5.1 Data Analysis

Following transcription of the interviews, a reflexive thematic analysis process was used to analyse the interview data collected within this study. Reflexive thematic analysis is the process in which patterns are described within qualitative data and grouped by common themes (Braun et al., 2018). It allows the researcher to explore differences or similarities amongst the transcripts, identifying any characteristics that will be key to the project (Magilvy & Thomas, 2009). This more immersive data analytic technique was deemed appropriate for the interview data compared to a more straightforward thematic analytic approach for the open-text response data in Study 1.

It is recommended by Braun and Clarke (2018) that the following six steps should be undertaken when undertaking a reflexive thematic analysis. These are (i) familiarisation, (ii) generating codes, (iii) constructing themes, (iv) revising themes, (v) defining and naming themes and (vi) producing the report. While this process may look linear, it consists of “constant moving back and forward between the entire data set, the coded extracts of data that you are analysing, and the analysis of the data that you are producing” (Braun & Clarke, 2006, p. 86).

3.5.1.1 Step One – Familiarisation with the data. Braun et al. (2018) suggest that researchers should become familiar with the content, which includes reading the transcripts multiple times. The researcher became familiar with the data transcribing, reading, making initial notes, and re-reading the transcripts before initial codes were developed. This step was undertaken to notice interesting aspects of the data individually and as a whole. This process enabled the researcher to understand the interview data thoroughly.

3.5.1.2 Step Two – Generating Codes. An inductive approach was employed during the coding process as there were no existing frameworks for codes to be derived (Braun & Clarke, 2006). While the researcher acknowledges that his experience as a rugby referee meant that there was potential for preconceived ideas, there was probably

limited impact in this case due to ongoing reflection and engagement with supervisors. The data was essentially organised around similar meanings and using codes to do so (Braun et al., 2018).

3.5.1.3 Step Three – Constructing Themes. Themes can be derived from visual thematic maps (Braun & Clarke, 2006) or tables (Grbich, 2013). The researcher used tables to create themes. Similar codes were grouped to tell stories about specific aspects of the data (Braun et al., 2018).

3.5.1.4 Step Four – Revising Themes. Following the construction of themes, they were reviewed and revised where necessary. Reviewing themes can be considered quality control in this process. At this point, some new themes were added while others were removed due to their lack of relevance. Reviewing themes ensures distinction among themes while ensuring data within themes meaningfully cohere (Braun & Clarke, 2006).

3.5.1.5 Step Five – Defining and naming themes. Following on from step four, themes were named and defined. This included articulating how the themes related to sub-themes (or codes) and creating a definition for each theme. Themes were presented using tables outlining themes and sub-themes (Grbich, 2013).

3.5.1.5 Step Six – Producing the report. Braun and Clarke (2006) mention that producing the report is the final step of thematic analysis. However, it is important to recognise that during this step themes may be tweaked and adjusted as necessary (Braun et al., 2018). As part of this project, a report was produced for the industry partner in shorter form. The full reporting on Study 3 appears in Chapter 6 of this thesis. Through this reporting writing process, theme names, definitions and fit were reflected upon and amended accordingly.

Chapter 4 - New Zealand Rugby Data

Chapter 4 is an overview of New Zealand Rugby (NZR) officiating data from 2011 to 2019. NZR is the national governing body for the sport of rugby union overseeing all aspects of the sport, including officiating. The data is of two types: 1) registration data from 2010-2019 and 2) survey data collected from 2013-2017 and 2019. The data is both numeric and text-based. The first data type was provided annually by officials to NZR as part of their registration with the national body to establish their eligibility to officiate. The second data type comes from a series of annual online surveys implemented by NZR in which the entire population of NZ's referees were invited to participate. This data set captures variables querying the referee's perceptions of environment, training, and support. The raw data from both types was cleaned, organised, and analysed as part of this project's wider aim: to explore the Early Career Referee (ECR) experience. The registration data was used primarily to establish retention rates across the refereeing community. The survey data was used primarily to draw a distinction between ECRs and Seasoned Referees (SRs) and to uncover distinctive elements of the ECR experience from open-text data. The insights generated from the NZR data and reported here in Chapter 4 serve as a foundation for Studies 2 & 3 to build upon.

4.1 Referee Registration Data

The registration data indicates that the number of rugby referees in New Zealand has been steady from 2014 to 2019. The number of active rugby referees peaked in 2013 at 2091. In 2012 almost 100 new rugby referees registered, which was the largest annual increase for the period the data covered.

In terms of gender, on average, 97% of registered referees were male. While the number of female referees has grown, they only account for 4.7% of all referees registered in 2019. Rugby participants in New Zealand mostly identify as New Zealand European, Māori or from one of the Pacific Islands. It has been reported in the media that those of Pacific descent are overtaking the number of New Zealand Europeans participating in rugby (Cleaver, 2018). However, this is not the case with rugby referees. From 2010-2019, approximately 75% of rugby referees identify as New Zealand European. The group that has grown the most is those who identify as Māori. In 2019, they made up almost 15% of all active rugby referees.

In the registration data, referees were characterised as either *returned* or *new*. A *returned referee* is someone who had previously registered, and a *new referee* is someone

registering for the first time. Approximately 80% of active rugby referees across the nine years returned to refereeing.

Over half (50.9%) of all returned referees were over 45 at the point of their registration, and almost three-quarters (72%) were 35 or older. Age is not necessarily an indicator of experience, as many referees begin their careers after they have stopped playing themselves. Some referees may commence from their mid to late 30s.

Table 4 depicts the retention rates for each of the age groups. This metric was calculated by dividing the number of returned referees by the total number of referees in the previous season. From 2010-2019, 79% of all registered referees had returned. Most notably, in 2013 and 2018, 85% of all registered referees returned. For all referees over 18, the retention rate is 82%. However, for those under 18, it is only 50%.

Table 4 - Retention Rates by Age

Retention Rates by Age

Age	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average
<18	45%	53%	57%	54%	51%	47%	50%	52%	39%	50%
18-24	79%	65%	73%	70%	78%	72%	68%	79%	85%	74%
25-34	67%	78%	83%	76%	80%	83%	70%	86%	84%	79%
35-44	70%	73%	79%	68%	78%	74%	75%	85%	76%	75%
45-55	82%	83%	85%	77%	85%	84%	79%	96%	83%	84%
55+	87%	95%	100%	87%	94%	97%	89%	91%	100%	96%
Average	75%	78%	85%	74%	80%	79%	75%	85%	81%	79%

4.2 NZR Surveys – Numeric Data

Descriptive statistics for several variables that featured in the 2013-2017 and 2019 rugby referee surveys are presented in Table 5. These include the number of referees who completed the survey each year, the provincial union to which they are connected, the grades that they refereed in that year, their experience in years and whether they intended to continue the following year. In addition, a dichotomous variable referred to as *Referee Tenure* was computed from the experience variable to more explicitly distinguish Early-Career Referees (ECRs) from Seasoned Referees (SRs).

Table 5 – NZR Survey Participants*NZR Survey Participants*

	n	%
Season		
2013	373	14.0
2014	435	16.3
2015	633	23.7
2016	424	15.9
2017	553	20.7
2019	252	9.4
<i>Total</i>	<i>2670</i>	<i>100.0</i>
Provincial Union		
Auckland	344	13.0
Bay of Plenty	150	5.7
Buller	8	0.3
Canterbury	366	13.8
Counties Manukau	114	4.3
East Coast	6	0.2
Hawkes Bay	116	4.4
Horowhenua-Kapiti	22	0.8
King Country	39	1.5
Manawatu	80	3.0
Mid Canterbury	46	1.7
North Harbour	146	5.5
North Otago	12	0.5
Northland	93	3.5
Otago	141	5.3
Poverty Bay	28	1.1
Southland	124	4.7
South Canterbury	51	1.9
Taranaki	71	2.7
Tasman	108	4.1
Thames Valley	38	1.4
Waikato	199	7.5
Wairarapa Bush	48	1.8
Wanganui	42	1.6
Wellington	238	9.0
West Coast	16	0.6
<i>Total</i>	<i>2646</i>	<i>100.0</i>
Grades Refereed*		
Junior (0-12 year olds)	456	17.1
Teen (13-18 year olds)	1210	45.3
Senior (>18 years old)	1510	56.6

	n	%
Tenure		
Early-Career (<5 years)	1016	38.4
Seasoned (>5 years)	1627	61.6
<i>Total</i>	<i>2643</i>	<i>100.0</i>
Intention to Continue		
Yes	2185	82.6
No	131	5.0
Undecided	329	12.4
<i>Total</i>	<i>2645</i>	<i>100.0</i>

*Respondents could choose all grades in which they refereed

Table 6 includes mean scores for nine items querying environment, training and support that were measured on a 5-point scale aggregated across the six surveys. This highlighted that referees are generally satisfied ($M=4.06$, $SD=0.97$). Referees were slightly less convicted that they were operating in a positive environment ($M=3.78$, $SD=0.95$). Referees felt appreciated by their provincial union ($M=4.03$, $SD=1.07$) and the players they referee ($M=4.05$, $SD=0.86$). Regarding training and support, referees felt sufficiently informed about changes to the way rugby is played and its laws ($M=4.33$, $SD=0.88$). However, support received from their provincial union to be more effective was comparatively lower ($M=3.89$, $SD=1.06$).

A series of independent samples *t*-tests were conducted to assess group differences between early-career referees and seasoned referees on the nine environment, training, and support variables. Results suggest there was a significant difference between ECRs ($M=4.19$, $SD=0.87$) and seasoned referees ($M=3.97$, $SD=1.02$) on overall satisfaction ($t(2386) = 5.74$, $p<.001$). Likewise, ECRs ($M=3.93$, $SD=0.90$) differed from seasoned referees ($M=4.13$, $SD=0.82$) on the extent to which they felt appreciated by the players ($t(2250)=-5.53$, $p<.001$). For the training and support items, ECRs ($M=4.01$, $SD=1.04$) reported that they felt more supported by their provincial unions than seasoned referees ($M=3.81$, $SD=1.08$; $t(1973)=4.47$, $p<.001$). Although several statistically significant differences were identified, in practical terms, these differences are modest.

Table 6 – Environment, Training and Support by Tenure
Environment, Training & Support by Tenure

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Please rate your overall level of satisfaction with refereeing rugby	2634	4.06	0.97	1009	4.19	0.87	1610	3.97	1.02	5.95***
Refereeing Environment										
The PU I am associated with provides a positive environment for referees	2284	4.20	0.98	906	4.32	0.90	1354	4.12	1.03	4.83***
The PU I am associated with supports me to be the best referee I can be	2278	3.93	1.08	904	4.05	1.02	1351	3.84	1.11	4.54***
I am appreciated by my PU for my refereeing	2279	4.03	1.07	903	4.12	1.03	1353	3.96	1.10	3.41**
I am appreciated by the players I referee	2275	4.05	0.86	904	3.93	0.90	1348	4.13	0.82	-5.53***
The clubs in my region provide a positive environment for referees	2279	3.78	0.95	903	3.75	0.97	1353	3.80	0.94	-1.40
Training and Support										
The support I receive from my Provincial Union helps me be a more effective referee	2272	3.89	1.06	899	4.01	1.04	1350	3.81	1.08	4.51***
The referee rugby education courses I have attended help me be a more effective referee	2267	4.02	0.96	898	4.06	0.96	1346	4.00	0.96	1.46
I am sufficiently informed of any changes to how rugby is played and rugby laws	2265	4.33	0.88	898	4.37	0.85	1345	4.30	0.89	1.77

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

A significant chi-square test revealed ECRs were more likely to continue compared to SRs $\chi^2(2, N=2173)=13.34, p<.001$ (Table 7).

Table 7 – Referee Tenure and Intention to Continue

Referee Tenure and Intention to Continue

Tenure	Continue		Discontinue		Not Sure		Total	
	n	%	n	%	n	%	n	%
Early Career	854	84.3	30	3.0	129	12.7	1013	100.0
Seasoned	1319	81.6	99	6.1	199	12.3	1617	100.0
<i>Total</i>	<i>2173</i>	<i>82.6</i>	<i>129</i>	<i>4.9</i>	<i>328</i>	<i>12.5</i>	<i>2630</i>	<i>100.0</i>

$\chi^2(df) = 13.342(2), p = .001$

4.3 NZR Surveys – ECR Open-Text Data

The ECR subgroup typed 593 unique open-text responses across several items in the 2013-2017 and 2019 online NZR surveys. Not every ECR entered text at every opportunity. Some text was entered in follow-up to a training, environment or support scaled item with a prompt (i.e., “please explain your response”), while other opportunities to enter text were standalone and probed various attitudes, perceptions, or other aspects of their experience. The open-text responses were not quite spread equitably across the six survey years or provincial unions but make for a rich data set, nonetheless. The 593 responses were compiled and analysed concurrently. More than half of the responses were from “older ECRs” (i.e., those who had been refereeing for 3-5 years; Table 8).

Table 8 - Respondent demographics*Open-Text Responses*

	n	%
Year		
2013	41	6.9
2014	119	20.1
2015	97	16.4
2016	96	16.2
2017	171	28.8
2019	69	11.6
<i>Total</i>	<i>593</i>	<i>100</i>
Provincial Union		
Auckland	68	11.5
Bay of Plenty	47	7.9
Buller	1	0.2
Canterbury	75	12.6
Counties Manukau	25	4.2
East Coast	1	0.2
Hawkes Bay	26	4.4
Horowhenua Kapiti	4	0.7
King Country	7	1.2
Manawatu	26	4.4
Mid Canterbury	9	1.5
North Harbour	44	7.4
North Otago	2	0.3
Northland	17	2.9
Otago	23	3.9
Poverty Bay	3	0.5
Southland	18	3.0
South Canterbury	17	2.9
Taranaki	14	2.4
Tasman	25	4.2
Thames Valley	8	1.3
Waikato	48	8.1
Wairarapa Bush	9	1.5
Wanganui	11	1.9
Wellington	55	9.3
West Coast	4	0.7
Not Entered	6	1.0
<i>Total</i>	<i>593</i>	<i>100.0</i>
Years Refereed		
Less than 12 Months	110	18.5
1-2 years	175	29.5
3-5 years	308	51.9
<i>Total</i>	<i>593</i>	<i>100.0</i>

The open-text survey data was analysed using the thematic analysis approach (Braun & Clarke, 2006). Through this process, four key themes were derived from the data. These were motivation, organisational environment, training and development and enjoyment (Figure 3). Each of the four key themes also had sub-themes sitting underneath. Quotes are provided alongside the presentation of themes. Referees are identified by their affiliated region and the length of time they have been engaged.



Figure 3 - Themes from ECR open-text responses in NZR surveys
Themes from ECR open-text responses in NZR surveys

4.3.1 Motivation

The ECRs identified a variety of drivers for their participation as rugby referees. However, ongoing engagement, giving back to the game, and career ambition featured prominently.

4.3.1.1 Ongoing Engagement. Refereeing was a natural pathway for respondents to continue participating in rugby in a non-playing role. This was evident with those recently retired from playing the game, whether due to age or injury. Comments such as “I enjoyed the ability to be still being part of the game after dislocating my shoulder” (Tasman, less than 12 months) or even “the fact that despite [I’m] unable [to] play the game that I can still keep involved” (Waikato, 3-5 years) reinforced this.

Respondents noted that being involved in the game through refereeing gave them other benefits. The benefits included learning more about the game – “getting involved in the game again and learning a new side of it other than playing and spectating”

(Canterbury, less than 12 months). Ultimately, this sub-theme is characterised by this comment from a Waikato referee (1-3 years) who indicated that they most enjoyed “being able to stay involved in rugby without playing. Refereeing is the perfect way to stay involved.” While the opportunity for continued involvement in the sport was relevant for some, the notion of giving back also featured strongly.

4.3.1.2 Giving Back. Refereeing was seen by many as an activity in which an individual gave back to a sport which they participated in. Many comments signalled this, such as a North Harbour referee (3-5 years), who indicated, “I cannot play anymore, and it is my way of giving back to the many years enjoyment I had whilst playing” this was further emphasised by a Mid-Canterbury referee (3-5 years) who noted, “I am [a referee] because I want to give something back to the game that has given me so much.” Furthermore, a former coach turned referee indicated that refereeing was their way of giving back, “putting something back into the game after coaching for past 15 years” (Auckland, 1-3years). As indicated, the experiences these referees had as a player or a coach provided the impetus to give others the same experience by becoming a referee. These sentiments are exemplified by the comments of a first-year Mid-Canterbury referee who noted that they enjoyed “the feeling of "giving" something back, I was always nervous to ref, but after the 1st game, I felt proud of myself for doing it and also for doing my bit.” Even though many indicated they were reciprocating to the game, some referees have identified it as a pathway to higher honours.

4.3.1.3 Career Ambition. When given the opportunity to express themselves through open-text responses, numerous referees outlined aspirational reasons for their involvement. Of those who indicated making a career out of refereeing, most of the comments were by referees with less than three years experience. This sub-theme is illustrated via comments such as “turning professional one day is definitely a career option” (Otago, less than 12 months), “I am looking forward to 2015 and hope one day [I] will make it to the top” (Wanganui, 1-3 years) and “trying to become a professional referee” (South Canterbury, 3-5 years). These findings suggest that whilst many drivers relate to the game or giving back, some believe they can make a career out of refereeing, which is probably similar to the subset of players driven by ambition. In sum, the motivation of referees can drive their continued participation. Other factors which drive referee engagement relate to the organisation to which they are connected.

4.3.2 Organisational Environment

Rugby Referee Associations (RRAs) play a vital role in the experience of rugby referees, including ECRs. Comments related to the direct impact of RRA staff, leaders or volunteers on engagement were coded within this theme. A few sub-themes related to the organisational environment were evident, including support, pathways, expectations, and rewards.

4.3.2.1 Support. ECRs made positive and negative comments regarding the support they received from their RRA. Some explicitly acknowledged the support they received and linked it to their ongoing engagement, such as this referee, for example: “excellent support. As a new referee, this year was excellent and motivated me to be a referee. Contact made on a regular basis from management administration through to mentors and assessors supporting me as a new ref” (Northland, 1-2 years). Similar sentiments were shared by several referees who had more refereeing experience, “the support from the referee’s union is amazing!” (Hawkes Bay, 3-5 years), the “support that Harbour rugby referees give us makes you want to keep coming back each year” (North Harbour, 3-5 years), and “the support we get from our PU (Provincial Union) is very good” (Manawatu, 3-5 years).

The decision to take up refereeing as a female can be very daunting, but two female referees indicated that the support they received had a positive impact. A first-year referee from Horowhenua-Kapiti indicated, “beginning as a rugby referee (and being a woman), I have been pleasantly surprised at the support I have received at my association.” This sentiment was echoed by a referee from Wellington (1-2 years) who noted, “being a female referee, I admit that I will have more support than most. But because of this support, I have fully enjoyed moving from player to referee.” These comments suggest that RRAs understand the added difficulties female referees may face and provided extra support to ensure they have a positive experience and continue to referee.

On the other hand, some ECRs commented negatively regarding their perceptions of support. These included broad statements such as “there needs to be more support for new referees, no one should be left on their own at their first game” (Canterbury, 3-5 years) to more personal experiences such as

I know we have a high-performance group. And I also know that young female referees seem to get a lot of additional support. The year I started, a young female started the exact same time. She was quickly taken by one

of the better Ref coaches, I was told 'Bit long in the tooth...' and given very little support in comparison. So, I have had to look at my own self-review & development, I have developed my own post-match reports, so I at least get something to work on... I would like to see all referees given support to be the best as they can. Many of us older referees put our hands up to do as many games as we can, often the less desirable games (Manawatu, 3-5 years).

It was evident that some ECRs perceive that RRAs put a lot of their support and development resources towards targeted demographics (i.e., women and those who are younger), leaving many other referees feeling forgotten and undervalued. Perceiving a lack of support may be particularly damaging for those with the ambition of progressing their career in refereeing.

4.3.2.2 Pathways. In and amongst the ECR reflections on their organisational environment, it was clear there is a sense that pathways (i.e., the route to higher level refereeing opportunities) are not effectively communicated.

Respondents noted that refereeing organisations should provide “clearer pathways for progression through the ranks” (Auckland, less than 12 months). Furthermore, there is a “lack of clarity re pathway to promotion” (Wairarapa Bush, 1-2 years), the lack of “a stepped process to advance referees from whatever level” (Bay of Plenty, 1-2 years), and “poor communication for transitioning up the grades” (Canterbury, 3-5 years). Further detail was given by a North Harbour rugby referee (3-5 years) who noted

I love doing what I do but would also love to go up in the grades, and don't feel like my union is communicating to me well enough on what I should be doing to go up higher in my refereeing.

Referee pathways are inherently blurry due to a myriad of factors, but the value of a document outlining the pathway in an RRA is clear. Having a transparent process related to pathways and progression means that feelings of being hard done by or favouritism is likely to be diminished.

4.3.2.3 Expectations. It was evident that within the various RRA organisational environments, the perception of expectations features prominently as part of the ECR experience. For example, referees are expected to cover multiple games per weekend, leaving some ECRs feeling pressured to do so and injuring themselves.

Several referees noted that they were expected to do multiple games a week or even on a single day. This was evidenced when they indicated that they least enjoyed being expected to do “too many games per weekend” (Manawatu, 3-5 years), or “having to do back to back games” (North Harbour, 3-5 years), and one went further to say they least enjoyed “the demand that is placed on you as a referee by the unions purely for the shortage of referees in numbers and quality” (Manawatu 3-5years). The shortage of referees and expectations on the few that are around seemed to have a detrimental impact on the ECR experience.

It is apparent that the power dynamics between referees and their administrators shapes the perception of expectations and, ultimately, whether referees accept multiple appointments in a day. A first-year referee from Canterbury outlined that they least enjoyed

The fact that I had to ref three games [in] one weekend, luckily two games were played at the same ground. This was a big ask for a new ref, I thought, but I wanted to show I was capable of doing it, but definitely won't be doing that again because I damaged both my [Achilles] tendons from the fields being so hard.

Several referees linked the perception of expectations and high workloads to injury. For example, a referee from Manawatu stated that - “getting injured by having to ref two games one after the other. At 52 years of age, I'm not as supple as I once was and require careful management so not to break so easily” (Manawatu, less than 12 months).

4.3.2.4 Rewards. Another element related to the organisational environment highlighted by ECRs was rewards. Some ECRs wrote comments about how they wished to be rewarded, while others noted that they did not expect a reward for their engagement.

A few referees indicated that being appreciated for their work was all the reward they needed. One wrote, “for me, just a thank you is enough. Even in electronic form or on social media, it doesn't need to be directed at the person just in general to all volunteers, as they will appreciate it” (North Harbour, 3-5 years), another wrote “just a thank you after the game. I get plenty of those. (Which is great because I don't think I am very good)” (Bay of Plenty, 3-5 years). A referee from North Harbour (3-5 years) stated that “thank you events by the union” would be welcomed. Overall, ECRs seem to relish appreciation from various stakeholders within the rugby system. This includes players, coaches, spectators and their RRA.

Rewards other than remuneration were also identified. For example, one ECR noted that “they (NZR) should look at giving more tickets to games to refs. Refs obviously like the game, so rewarding them with All Blacks/Super Rugby tickets seems appropriate” (Wellington 1-3 years). Tickets to NPC, Super Rugby and international rugby matches were indicated. A Taranaki referee (1-3 years) noted, “cheap or free tickets to matches are good, such as M10 cup (Mitre 10 Cup) games, Super Rugby or ABs.” It was evident that referees have received complimentary tickets to Super Rugby and NPC games in the past, but this has decreased or ceased in recent times. As an Auckland referee (3-5 years) noted, “I ref for the love of the game, not rewards; however, we did use to enjoy Super Rugby tickets as a bonus. It is a shame this has ended.” A Wellington referee (3-5 years) noted, “The WRFU (Wellington Rugby Football Union) reduced the number of complimentary tickets for referees to watch the ITM Cup (National Provincial Championship) from 2 to 1.” These sentiments indicate that ECRs were content with receiving complimentary tickets to NPC, Super Rugby, or international games as rewards for their efforts. However, with this being phased out recently, referees seem to have taken note.

Some referees went beyond just being appreciated and receiving other benefits. They conveyed their feelings about remuneration directly. For example, one referee stated that “I think PU referees should get some sort of financial help for petrol and travel money that would suit. This would help very much” (Counties Manukau, 3-5 years) and “the only thing I can see which could help keep referees and encourage new ones is some sort of payment, mainly to cover fuel costs when having to drive long distances to games” (North Harbour, 3-5 years). Another ECR talked about their personal experience and indicated that referees could

Get paid petrol vouchers for travel as I have to travel at least two hours every Saturday to ref a game, and because other referees go and ref games when instead they could be hanging out with [their families], but they do it because they know that we need referees (West Coast, 1-3 years).

Another ECR suggested the financial burden could fall onto clubs. “We need to retain people and ensure they are compensated for their roles to keep the stress out of commitment to the game. Clubs need to cough up funds for this as they do in other countries (Tasman, 3-5 years).”

4.3.3 Training and Development

An array of comments were made by ECRs conveying their perceptions of training and development. These perceptions were often explicitly concerned with referee coaching, in-season education, and self-directed learning resources.

4.3.3.1 Coaching. Coaching plays a vital role in the development of rugby referees and is an important dimension of the overall ECR experience. Through coaching, referees can develop by understanding what they are doing well and not so well on the field. ECRs commented on aspects of coaching, highlighting the lack of referee coaching, attitudes or behaviours of referee coaches, the referee coaching system and the positive experiences of referee coaching they received.

Many comments related to the lack of coaching referees have received over time. One ECR noted the “lack of coaching” and wondered “how can you improve if you only get one report in 3 years?” (Canterbury, 3-5 years). Another indicated that they “would like more assessments and feedback” (Otago, less than 12 months). ECRs also conveyed that coaching was not made available equitably across the community.

Some ECRs perceived that most of the coaching was going to referees who were identified as high performing. One referee indicated that they least enjoyed “lack of individual mentoring (1 report...) as focus goes mainly on top 10 & promising youngsters” (Counties Manukau, 3-5 years), and another indicated “the amount of referee coaches could be shared more evenly amongst the refs and not so much focused on the ‘show ponies’ as it were” (Bay of Plenty 1-3 years). Another referee shared a similar sentiment: “Very little coaching/support. I had one [RIMMS] report and only had one visit from my ‘coach’ all season. I realise as an older referee, I may not get as much help as the younger, more ‘promising group’ (Manawatu, 3-5 years).”

While some ECRs had been allocated an individual coach, the lack of value they perceived from those interactions detracted from their experience. For example, one ECR indicated:

My coach was not present. I saw him once during the entire season and was a waste of time. I had the same coach as last year (who I saw maybe twice in the season). I do not expect to get to Div 1 as a ref, but I do expect to be able to be given the training and support to be the best ref I can be, and a non-existent coach does not assist me (Canterbury, 3-5 years).

One referee suggested a policy be implemented to ensure that all referees receive the coaching support they require. That person went on to say that refereeing associations

“make allocated mentors compulsory & benchmark a minimum of 3 written reports per referee covering full field games (U11+)” (Counties Manukau, 3-5 years). Whilst this idea is great in principle, it is noteworthy that a lack of referee coaches would likely significantly impact the implementation.

Overall, ECRs seem to convey that a lack of coaching opportunities impedes their development. When ECRs did interact with coaches, it often left them wanting more, although not all the time. One ECR commented on the delivery of coaching and how it was not always consistent:

Some coaches within our union are awful in giving out their 'coaching advice'. They can be extremely critical and often take an extremely opinionated view which can often completely contradict that of another coach... I'm sure some newer, and younger refs could be put off by some of the comments they hear. (Bay of Plenty, 1-3 years)

ECRs who commented positively about their coaching experiences were generally newer and had been refereeing for less than three years. A King Country referee (1-2 years) indicated that they enjoyed “receiving feedback (positive and negative) from our referees and referee trainers to enable me to keep upskilling”. Another first-year referee from Hawkes Bay noted that they enjoyed “getting feedback from more seasoned referees with many constructive tips and areas to improve on.” This would suggest that coaching support to referees tapers off after three years. Overall, the findings indicate there are opportunities to improve the coaching system to ensure the development of all referees. As part of the wider theme of training and development, ECRs also offered perspectives on in-season education.

4.3.3.2 In-season Education. ECRs provided a variety of perspectives on the weekly meetings or development sessions organised by RRAs, characterised here as in-season education. These are planned and delivered by RRA or PU staff. Comments concerning content in-season education were mixed. Some referees found bringing experts into meetings beneficial. One referee indicated that they enjoyed having “Kane Hames teaching us the insights of front row technicalities” (North Harbour, 1-3 years). Another indicated that they “really appreciated the training nights, and the start of season input from the professional refs” (Canterbury, 3-5 years). This would suggest that elements of the in-season education sessions are done well.

Conversely, other referees were quite critical. This was exemplified with comments such as “no course as such are offered, we meet every Monday night but is not

effective to on-field refereeing” (Manawatu, 3-5 years), “run better meetings having panel discussions is a cop-out for not being organised remember we are not paid you are” (Auckland, 3-5 years), “we receive little to no direct training from the PU with regards practical refereeing either fitness nor on-field skills” (Tasman, 3-5 years), and “same training plan as previous year. Just same old stuff just re-run. Need to update training material.” (Manawatu, 1-3 years). However, one referee indicated that the education content was unsuitable, especially early in the season. That person noted that they were unprepared, “especially at the beginning of the season, I needed some sort of refresher course to get me up to speed. It was not a nice feeling being caught out like that (Northland, 1-3 years).”

The sentiments conveyed by ECRs suggest that RRAs need to consider and plan their in-season education programmes better to ensure engagement and the perception of value. In addition to the perspectives offered regarding in-season education, ECRs also offered views on self-directed resources that are provided as part of the ongoing training and development of referees.

4.3.3.3 Resources. Referees commented that there is a lack of resources to develop their skills in their own time. These resources are generally developed by RRA, PU or NZR staff to complement the in-season education programmes. ECRs conveyed through the open-text queries that they wanted resources specifically for fitness development, strength and conditioning, injury rehabilitation, and technical aspects of refereeing. One common perception was that the resources are not referee-specific, “the coaching toolbox is primarily aimed at coaches and players with little content directly applicable to referee development” (Tasman, 1-3 years). Another referee went on to further explain what they would like to see in the NZR coaching toolbox.

[I] believe [the] coaching toolbox could be further improved with more resources specifically for referees. For example, around fitness and strength conditioning, injury rehabilitation, and some skills and drills specific to referees, including positional play also mental checklists for play phases. (Tasman, 3-5 years)

A referee from Otago (less than 12 months) delved further and indicated what kind of fitness resources were desirable.

Would like to see more guidelines on the fitness side for lower down for referees looking to go further. E.g., not have a minimum level of fitness

requirement such as a beep test but have training plans and benchmarks available for those wishing to go further.

Another referee was frustrated by the lack of resources from their PU and NZR, so much so that they took it upon themselves to find rugby referee resources from elsewhere.

Despite asking for access to resources at a Union level in particular access to fitness development resources and injury rehabilitation resources, we have not received any. I have since utilised web-based resources from other NZ Unions and South Africa, and England. Through my own research, I have also found books produced by the IRB which cover these areas. However, I believe access to local personal resources in Union used to develop regional teams would allow greater improvement of Referees' skills and fitness, making us more effective on the field. This, in turn, would allow for improved regional rugby standards. (Tasman, 3-5 years)

These comments highlight that the platform run by NZR (coaching toolbox) could have more relevant information for referees. Using this platform to disseminate more resources means that referees who want to develop their refereeing further are able to do so. From there, it is paramount that referee educators create awareness of this resource to ensure engagement.

4.3.4 Enjoyment

Some aspects of the refereeing experience identified to this point have been negative. However, the ECRs recounted several aspects of the role that were enjoyable when prompted with open-text queries. These include opportunities, development, appreciation, and connections developed with other referees.

4.3.4.1 Opportunities. Several ECRs indicated that the opportunities made available to them contributed to their overall enjoyment in the role. Opportunities to referee higher-grade games are cherished by ECRs and link to an overall sense of enjoyment. For example, referees noted “opportunities for games at different levels” (Bay of Plenty, 1-3 years), “the opportunity for different skilled level rugby games that provided a challenge in me dealing with players and also to the rules of the game” (Southland, 1-3 years), “the opportunity to ref at higher levels than I previously had” (Waikato, 3-5years), and “being involved in different levels from ARing to refereeing to

sub controlling etc.” (Wellington, less than 12 months). This suggests that there is value in challenging ECRs with opportunities they may not be entirely comfortable in. This should be considered by referee administrators when allocating referee appointments.

ECRs also cited the opportunity to referee finals or representative matches as a source of enjoyment. Some referees indicated, “I enjoyed being involved in tournaments such as the Hurricanes U16's tournament in Palmerston North” (Wellington, 1-2 years), being “selected for the Hurricanes Under 16 tournament” (Wairarapa Bush, 3-5 years), “getting rewards with a few finals including one televised” (Waikato, 3-5 years), and being involved in “Heartland Rugby refereeing, being involved in ITM Cup as an AR, and refereeing Premier Club rugby” (North Harbour, 3-5 years). Overall, these opportunities have a positive impact on ECRs’ enjoyment. A referee from Southland (3-5 years) captured this sentiment by stating that “the opportunities [they were] given in terms of promotion, finals, representative matches, and interchanges were excellent, and the development and training were highly effective.” These insights indicate that being provided opportunities with challenging and/or prestigious games is enjoyable and a positive aspect of the ECR experience. Therefore, these opportunities should be shared where possible. Furthermore, referees reflected and indicated that noticing themselves develop brought them enjoyment too.

4.3.4.2 Development. In the open-text portion of the NZR surveys, ECRs indicated that their development is a source of enjoyment. Quotes that signified this included “getting better and learning more” (Canterbury, 1-3 years), “becoming more confident in refing throughout the year” (Southland, less than 12 months), “improving my skills and ultimately getting better and achieving more” (Manawatu, 1-3 years), “becoming a better referee in myself through mistakes and learning” (Waikato, 3-5 years), and enjoying “the pace at which I have been able to progress and the opportunities that have enabled me to do so” (Wellington, less than 12 months). These sentiments indicate that RRAs could work with ECRs to benchmark and identify development to ensure they are enjoying refereeing on an ongoing basis.

4.3.4.3 Appreciation. Whilst lack of appreciation from administrators detracted from the referee experience, receiving appreciation from players, coaches and spectators was a source of enjoyment for ECRs. Examples of this sentiment include “getting thanked from players in both teams after a game” (King Country, 3-5 years), “thanks and appreciation received from coaches and players” (Wanganui, 3-5 years), and “getting thanked by players, coaches and parents” (Southland, 1-3 years). This sub-theme is typified by a comment from an Auckland referee (3-5 years) who indicated that they

enjoyed “being acknowledged and complimented on my contribution to the game by the players, management and supporters.” These results indicate that ECRs enjoy being told they have done a good job.

4.3.4.4 Connection. Refereeing can be an isolating experience, particularly in the context of lower-level games. Thus, the social connection and camaraderie developed amongst referees is important, and indeed ECRs conveyed in the NZR data that this contributes to overall enjoyment in the role. Referees have noted that the “camaraderie between our refereeing group is great” (Wellington, 3-5 years), “the camaraderie and support within our referee's association has been a major factor in my enjoyment” (Wairarapa Bush, less than 12 months), and “camaraderie among refs is great” (Bay of Plenty, 3-5 years). This highlights that there are opportunities to connect in the context of the refereeing role. It also further indicates that RRAs are potentially welcoming environments for many. Many referees transition from playing to refereeing. ECRs indicated that the team element they experienced while playing existed in refereeing, too and that they enjoyed it.

A couple of referees who were former players expressed concern that they might lose the team element they enjoyed as a player. One noted that “not losing the sense of camaraderie that I thought I would [lose] not playing as a part of a team” (Otago, less than 12 months) was a good thing and indeed enjoyable. Another reinforced this sentiment by indicating that “this was my first year as a referee and been well supported by the other referees, I have really enjoyed the different experience to [being] a player” (Canterbury, 1-3 years). These findings highlight that camaraderie within a refereeing organisation has many positive outcomes, including enhancing the enjoyment of the refereeing experience.

4.4 NZR Data Discussion

Overall, the analysis of NZR data allows one to begin to understand the ECR experience in rugby. A discussion of the findings from this context-building phase are discussed alongside relevant literature in the sections below.

4.4.1 Retention

The NZR data has enabled a comprehensive exploration of ECR retention. Specifically, the data included both referees' intention to continue (ITC) as well as whether they actually did so. Notably, referees reported slightly higher intentions to continue (83%) than the data suggests actually did so (79%). Given that they are relatively

close is unsurprising as an extensive body of research links the two constructs (Ajzen, 2001). It is well worth digging deeper into the many factors that influence both ITC and retention for ECRs and how this differs from SRs.

Alarm has been widely reported in mainstream media (e.g. Pearson, 2021; Watson, 2021) and the literature (e.g. Jacobs et al., 2020; Jordan et al., 2019; Livingston & Forbes, 2017; Ridinger, 2015; Zvosec et al., 2021) about increasing referee attrition. While many factors have been attributed to the attrition of match officials worldwide, such as their experience (e.g. Kellett & Shilbury, 2007; Ridinger, Kim, et al., 2017), motivations (e.g. Giel & Breuer, 2019; Hancock et al., 2015; Livingston & Forbes, 2017, 2016; Livingston et al., 2017), and perceived organisational support (e.g. Choi & Chiu, 2017; Cuskelly & Hoyer, 2013; Giel & Breuer, 2019; Kim, 2017; Livingston & Forbes, 2016; Livingston et al., 2017). Therefore, we know that officials' retention is difficult and complex (Auger et al., 2010). The results suggest that the overall experience is positive enough for most to continue. However, analyses of returning referees by age highlights some deficiencies.

When considering the percentage of returned referees by age, it is quite clear there is an issue with younger referees. On average, only half of the referees under 18 returned the following year over the 2010-2019 period. It may be that RRAs are not providing sufficient support for this group to facilitate their ongoing engagement. This is an interesting result as respondents highlighted that younger referees were being provided the most support. In other research, it has been reported that younger referees lack the coping strategies to deal with the stressors of officiating, ultimately leading to discontinuation (Balch & Scott, 2007). It has also been indicated that younger referees are under considerable pressure to advance (Cuskelly & Hoyer, 2004). However, officiating organisations generally value and provide more support to younger referees (Livingston & Forbes, 2017). While literature is limited as it relates to the experiences of young referees and their reasons for discontinuation (Baldwin & Vallance, 2016b; Livingston & Forbes, 2016; Webb, 2020), the results here suggest that more research needs to be done to better understand this phenomenon.

Referee retention for ECRs specifically is also of interest. This is distinct from the previous discussion of younger referees, as being early career and younger are not one in the same. Studies elsewhere have found that discontinuation rates of first-year match officials can be up to 60% (Bernal et al., 2012; Cuskelly & Hoyer, 2004; S. L. Forbes & Livingston, 2013). The discontinuation rates for ECRs in this study were significantly lower. This could be as a result of the support mechanisms put in place by RRAs. Across

some of the larger referee associations, new referees join what is known as a first-year programme (New Zealand Rugby, n.d.). In this programme, they are with other first-year referees and are supported intensively to develop their skills, competence and confidence (Wellington Rugby Referees Association, 2022). Whilst the studies that reported high turnover rates for first-year officials did not describe similar programming, it may be that this is the key support mechanism. More so, it could be that the intensive and intimate support provided in the first-year influences intention to continue, consistent with other studies (Choi & Chiu, 2017; Cuskelly & Hoye, 2013; Giel & Breuer, 2020; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016). Other distinctions between ECRs and SRs were evident from the NZR data analysis, and these are discussed next.

4.4.2 Distinguishing ECRs

Several significant differences between ECRs and SRs came through from the NZR survey data. It is important to acknowledge that whilst significant differences on some means scores were uncovered, many were not likely substantively different. Nevertheless, it is worth identifying where the two groups are similar as well as highlighting subtle differences between ECRs and SRs.

Numerous studies have found that officials are generally satisfied in their role (Choi & Chiu, 2017; Giel & Breuer, 2021; S. Kim, 2017; Parsons & Bairner, 2015; Spor & Dergisi, 2017). Several factors have been found to influence that satisfaction, including enjoyment (Cuskelly & Hoye, 2013; Parsons & Bairner, 2015; Ridinger, 2015; Warner et al., 2013), recognition, respect and appreciation (Kellett & Warner, 2011; Spor & Dergisi, 2017), receiving feedback (Cuskelly & Hoye, 2004), and perceptions of organisational support (S. Kim, 2017). The high levels of satisfaction amongst both ECRs and SRs noted here is likely the result of the positive environment facilitated by RRAs and PUs, the support they receive, appreciation from players, and the training and support they receive – all of which all rated highly for both groups.

Another result of interest is the slight difference between ECRs and SRs on player appreciation. There is a large and growing body of literature suggesting that officials want to feel appreciated by their officiating organisation and the players (e.g., Forbes & Livingston, 2013; Giel & Breuer, 2021; Hong, Jeong, & Downward, 2019; Kim & Yip, 2018; Ridinger et al., 2017; Schaeperkoetter, 2017; Tingle, Warner, & Sartore-Baldwin, 2014; Warner et al., 2013). The results here suggest that seasoned referees perceive more appreciation from players than ECRs. However, there is a lack of previous research covering any enduring distinction on this. It may be that SRs sense more appreciation

because they are more comfortable sharing a drink or chatting with players post-match (Baldwin, 2013b). Thus, RRAs, clubs and schools should work together to build more meaningful relationships to ensure that ECRs are similarly appreciated.

4.4.3 The role of the organisation in the ECR experience

It is apparent from the NZR data that RRAs play a prominent role in the ECR experience. This includes providing support and development, ensuring referees are competent, confident, and safe in their role, as well as providing opportunities and rewards. In some ways, the results from the numeric data do not quite align with what emerged from the open-text data, which is worth discussing further.

Analysis of the numeric data suggests that the RRAs are doing a good job of ensuring that referees are competent, confident, and safe. However, the open-text data does not quite line up, with many respondents using this opportunity to air grievances about RRAs. Whilst many have highlighted that the support they receive is appropriate, the opportunities to progress, expectations to do multiple games a weekend and the lack of rewards were also indicated.

Providing appropriate support is central to facilitating referee continuation (Choi & Chiu, 2017; Giel & Breuer, 2020; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016). ECRs generally reported satisfactory support, which could explain the remarkable ECR continuation rates evident from the NZR data. Equally, a lack of organisational support has adverse effects on the continuation of officials, which is further exacerbated for women (Baldwin & Vallance, 2016b; Nordstrom et al., 2016; Schaeperkoetter, 2017; Tingle et al., 2014). While female respondents here reported that the support provided to them has been exemplary and supported their integration into a male-dominated space, it has been found in rugby contexts elsewhere that organisations poorly support female referees (Baldwin & Vallance, 2016b). The positive support noted here may relate to an ever-increasing focus and priority placed on women and girls in sport. Therefore, the few women that choose to become referees must be provided the appropriate support to ensure they integrate into the RRAs and have a positive experience. These actions would best support their continuation.

ECRs also indicated that the organisational expectation to do multiple games a week and sometimes a weekend detracted from their experience. Sometimes these ECRs felt the pressure to do multiple games in a day because of the shortage of referees in their region. This led some to get injured, exacerbating the referee shortage issue. It has been reported that doing multiple games a day over time can have a detrimental effect on the

performance of referees (Baldwin, 2013b). Being exposed to many games over a short period could fast-track the development of referees, but without the appropriate organisational support, it could also lead to referee burnout. Studies suggest that referees who experience burnout are likely to quit (Al-Haliq et al., 2014; Livingston & Forbes, 2017; Rainey & Hardy, 1999; Spor & Dergisi, 2017). These sentiments would suggest that RRAs need to be wary of overloading referees, as expecting them to do multiple games to ensure that matches are covered can have detrimental effects, especially on those who are older and susceptible to injury.

Overall, rugby refereeing in New Zealand is a volunteer role where many incur personal costs to provide a service. The NZR data shows that referees seek more comprehensive recognition of their efforts. Many indicated that free tickets or other benefits would be welcomed. While benefits like this have been found to have a positive influence in the volunteering literature (e.g. Kotrou & Downward, 2015; Mykletun & Himanen, 2016; Park & Kim, 2013; Schlesinger et al., 2013; Wicker, 2017), further investigation is required to understand the value of these incentives for officials (Baldwin & Vallance, 2016a). Furthermore, RRAs should build strategic relationships with their PUs and local Super Rugby franchises to ensure they acknowledge their volunteer referees' efforts.

In summary, through the analysis of the registration and survey data, it is evident that NZR and RRAs are doing some things well, which is indicated by the high continuation intentions and behaviours. Furthermore, it uncovered that ECRs and SRs are not homogenous and so sets the platform for the subsequent studies as part of this wider project. The NZR data also highlighted that RRAs are central to the ECR experience. This provided further evidence that focusing on the role of the officiating organisation is of value to referees and the literature. In generating such insights from the NZR data as reported above, this Chapter has established an important foundation for Studies 2 & 3 (forthcoming).

Chapter 5 - Referee Survey Findings

Chapter 5 covers the survey data collected in Study 2. This data set was separate from and in addition to the New Zealand Rugby (NZR) survey data sets covered in the previous chapter as part of Study 1. In 2020, the online survey was electronically disseminated to all registered rugby referees via email to explore research questions 1-4. Multiple constructs were captured in the survey including motivation, perceived organisational support, organisational commitment, role commitment, other organisational factors, abuse, sense of community and intention to continue. The chapter begins with a description of the survey participants before comprehensive analyses of the focal construct relationships are provided and a discussion. Findings in this chapter are presented for early-career referees (ECRs), the subgroup of interest for the wider research project. Findings for seasoned referees (SRs) are often presented to provide a contrast, while in other cases, data for all referees (ARs) is presented alongside ECRs. Various descriptive and other stats for the AR group are presented to allow direct comparison with other published research in which ECRs and SRs are not distinguished.

5.1 Participant Characteristics

Ultimately, the data from 320 respondents was analysed in this study. 123 (38.7%) respondents had been refereeing for five years or less, so their tenure is characterised as ECR (Table 9).

Table 9 – Tenure of Respondents

Tenure of Respondents

	<i>n</i>	<i>%</i>
Early-Career	123	38.7
Seasoned	195	61.3
<i>Total</i>	<i>318</i>	<i>100.0</i>

The vast majority of respondents (95.6%) identified as male. Of the 13 female respondents, 10 were ECRs (Table 10).

Table 10 – Gender*Gender*

	All Referees		Early-Career	
	<i>n</i>	%	<i>N</i>	%
Male	306	95.6	113	91.9
Female	13	4.1	10	8.1
Gender Diverse	1	0.3	0	0.0
<i>Total</i>	<i>320</i>	<i>100.0</i>	<i>123</i>	<i>100.0</i>

A majority of ECR respondents (43.8%) reported their age as between 30 and 49 years old, while another largest subset (40.7%) were 29 years old or younger (Table 11).

Table 11 – Age*Age*

	All Referees		Early-Career	
	<i>n</i>	%	<i>N</i>	%
10-14 years old	4	1.3	4	3.3
15-19 years old	17	5.3	16	13.0
20-24 years old	19	5.9	10	8.1
25-29 years old	35	10.9	20	16.3
30-34 years old	32	10.0	11	8.9
35-39 years old	15	4.7	8	6.5
40-44 years old	32	10.0	16	13.0
45-49 years old	40	12.5	19	15.4
50-54 years old	43	13.4	12	9.8
55-59 years old	37	11.6	6	4.9
60-64 years old	30	9.4	1	0.8
65+ years old	16	5.0	0	0.0
<i>Total</i>	<i>320</i>	<i>100.0</i>	<i>123</i>	<i>100.0</i>

Community rugby participants in New Zealand are diverse, including high numbers of Māori and Pacific Island players. That diversity is not reflected among New Zealand's rugby officials. In this sample, New Zealand European and Māori referees accounted for 96.5% of respondents (Table 12). With the growing diversity of New Zealand, many New Zealanders are mixed-race and select multiple ethnicities when prompted.

Table 12 – Ethnicity*Ethnicity*

	All Referees		Early-Career	
	<i>n</i>	%	<i>N</i>	%
New Zealand European	267	83.4	97	78.9
Māori	42	13.1	16	13.0
Pacific Peoples	12	3.8	8	6.5
Asian	4	1.3	2	1.6
Middle Eastern	0	0.0	0	0.0
Latin American	0	0.0	0	0.0
African	3	0.9	1	0.8
Other	17	5.3	8	6.5

Note: Percentages may not equal 100% due to respondents being able to select multiple responses

Survey respondents indicated which province they are connected to as well as how many matches per week they typically officiate. Auckland was the Provincial Union with the most respondents (15.9%), followed by Wellington (12.5%; Table 13). No other Provincial Union accounted for more than 10% of respondents, and a very small number were not connected to any union. There was at least one respondent from each of NZ's Provincial Unions.

Table 13 – Provincial Union Breakdown*Provincial Union Breakdown*

	All Referees		Early-Career	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Auckland	51	15.9	16	13.0
Bay of Plenty	23	7.2	12	9.8
Buller	3	0.9	2	1.6
Canterbury	22	6.9	6	4.9
Counties Manukau	12	3.8	5	4.1
East Coast	3	0.9	2	1.6
Hawkes Bay	17	5.3	8	6.5
Horowhenua-Kapiti	5	1.6	3	2.4
King Country	5	1.6	2	1.6
Manawatu	4	1.3	1	0.8
Mid-Canterbury	1	0.3	0	0.0
North Harbour	19	5.9	9	7.3
Northland	8	2.5	3	2.4
Otago	22	6.9	7	5.7
Poverty Bay	5	1.6	1	0.8
Southland	10	3.1	4	3.3
South Canterbury	3	0.9	2	1.6
Taranaki	5	1.6	3	2.4
Tasman	15	4.7	8	6.5
Thames Valley	5	1.6	3	2.4
Waikato	19	5.9	6	4.9
Wairarapa Bush	9	2.8	3	2.4
Wanganui	5	1.6	1	0.8
Wellington	40	12.5	14	11.4
West Coast	6	1.9	2	1.6
Other	3	0.9	0	0.0
<i>Total</i>	<i>320</i>	<i>100.0</i>	<i>123</i>	<i>100.0</i>

Respondents had been involved in rugby refereeing for an average of 11.5 years (SD=10.43). ECRs reported an average of just over three years of experience (M=3.08, SD=1.37). Overall, ARs officiated about 1.5 matches per week and ECRs as a subset, about the same (Table 14).

Table 14 – Matches per Week*Matches per Week*

	<i>n</i>	<i>M</i>	<i>SD</i>
All Referees	320	1.51	0.72
Early-Career Referees	123	1.56	0.81

5.2 Motivation

Having outlined the characteristics of the sample, the focus now shifts to reporting on the analysis of relationships among the variables that was undertaken. First, *t*-tests were conducted to identify differences between experienced and early-career rugby referees on motivation and its various dimensions. Four motivation dimensions were explored to gain a deeper understanding of onset drivers to referee: Intrinsic, Extrinsic, Sport-Related and Social. Whereas an additional dimension was included for continuing – Role-Specific. The following analyses consist of a contrast between motivation at role onset (i.e., when a referee started) and motivation on a continuing basis for each motivation dimension. In the survey, referees were prompted to distinguish between and respond separately to statements about onset and continuing motivation for each dimension in their own experience.

5.2.1 Onset Motivation

Table 15 is the list of referee motivation items specific to onset (i.e., when a referee began in the role). Intrinsic motivation items (i.e., because of my passion for rugby and have fun) and sport-related motivation items (i.e., remain active in rugby and feeling that I am helping, contributing, or giving back) had higher mean scores than social and extrinsic motivation items.

Mean scores for three items were significantly different between ECRs and SRs. SRs ($M=6.28$, $SD=1.35$), reported that they were more motivated to begin refereeing in order to remain active in rugby compared to current ECRs ($M=5.70$, $SD=1.79$; $t(208)=-3.07$, $p<.01$). ECRs ($M=2.88$, $SD=2.06$) were more likely to begin refereeing to advance their career ($M=2.34$, $SD=1.75$; $t(226)=2.43$, $p<.05$) in comparison to SRs.

Table 15 – Onset motivation by Tenure*Onset motivation by Tenure*

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
<i>I became a rugby referee to:</i>										
Have a change of setting ⁴	320	3.52	1.77	123	3.49	1.72	195	3.53	1.79	-0.22
Be of service to my sport ³	320	5.56	1.60	123	5.63	1.52	195	5.51	1.66	0.61
Achieve something I am proud of ¹	320	5.06	1.73	123	5.06	1.72	195	5.07	1.72	-0.08
Gain personal development ¹	320	4.89	1.76	123	5.07	1.61	195	4.77	1.83	1.53
Have control over events ²	320	2.80	1.80	123	2.70	1.76	195	2.86	1.82	-0.78
Receive remuneration ²	320	1.62	1.24	123	1.78	1.40	195	1.52	1.12	1.72
To be known in the rugby community ²	320	2.39	1.59	123	2.54	1.63	195	2.29	1.56	1.38
Make friends ⁴	320	3.88	1.94	123	4.10	1.89	195	3.74	1.96	1.61
Have fun ¹	320	5.81	1.46	123	5.84	1.54	195	5.77	1.41	0.37
Remain active in rugby ³	320	6.06	1.56	123	5.70	1.79	195	6.28	1.35	-3.07**
Meet people ⁴	320	4.29	1.94	123	4.26	1.96	195	4.31	1.93	-0.21
Change my role within rugby ³	320	4.10	2.19	123	3.85	2.13	195	4.26	2.20	-1.66
Have influence in the rugby community ²	314	2.89	1.89	121	3.01	1.94	191	2.82	1.86	0.85
Give back ³	314	5.55	1.69	121	5.57	1.66	191	5.53	1.72	0.21
Respond to the needs of the rugby community ³	314	4.75	1.87	121	4.83	1.75	191	4.70	1.96	0.60
Promote rugby ³	314	4.37	2.01	121	4.63	1.88	191	4.20	2.07	1.82
Prove to myself what I can do ¹	314	4.43	2.08	121	4.55	2.07	191	4.35	2.07	0.84
Respond to the shortage of rugby referees ³	314	4.28	2.10	121	4.55	1.99	191	4.11	2.16	1.79
Help advance my career ¹	314	2.56	1.91	121	2.88	2.06	191	2.34	1.75	2.43*
Gain the title of official ²	314	1.91	1.52	121	2.12	1.62	191	1.75	1.39	2.03*
Because of my passion for rugby ¹	314	6.06	1.30	121	5.97	1.39	191	6.12	1.24	-1.01

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Feel that I am helping, contributing, or giving back ³	314	5.64	1.55	121	5.59	1.54	191	5.68	1.56	-0.49
Have new experiences ⁴	314	4.79	1.90	121	4.99	1.79	191	4.67	1.95	1.47
To be more integrated in rugby ³	314	4.14	2.00	121	4.32	2.00	191	4.03	1.99	1.26

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; ¹Intrinsic motivation; ²Extrinsic motivation; ³Sport-related motivation; ⁴Social motivation;

5.2.2 Continuing Motivation

Like items measuring intrinsic onset motivation, referees also agreed more strongly with statements about continuing intrinsic motivation items (i.e., I enjoy being a rugby referee and I have fun) than social, sport-related, extrinsic, and role-specific motivation items (Table 16).

The role-specific items which measured flexibility ($M=4.78$, $SD=1.76$) and being physically suited to refereeing ($M=4.89$, $SD=2.18$) provided new insights.

Four of the 18 items were significantly different between ECRs and SRs as it related to continuing motivation. For ECRs, ($M=4.45$, $SD= 1.94$) the opportunity to advance was more motivating in comparison to SRs ($M=3.32$, $SD=2.06$; $t(307) =4.80$, $p<.001$). Furthermore, a statistically significant difference was found between ECRs ($M=5.02$, $SD=1.44$) and SRs ($M=5.59$, $SD=1.41$) on perception of competency ($t(308)=-3.48$, $p<.01$).

Table 16 - Continuing Motivation by Tenure
Continuing Motivation by Tenure

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
<i>I am a rugby referee because...</i>										
I have a task that fits my capabilities ¹	312	4.56	1.81	120	4.33	1.79	190	4.70	1.81	-1.74
I feel that I am progressing personally ¹	312	4.46	1.90	120	4.84	1.74	190	4.23	1.97	2.87**
I have fun ¹	312	5.87	1.36	120	5.81	1.39	190	5.90	1.36	-0.58
I feel a sense of belonging ⁴	312	4.59	1.91	120	4.44	1.80	190	4.66	1.97	-1.00
I receive appreciation from others ²	312	4.02	1.88	120	4.08	1.83	190	3.97	1.92	0.49
I feel respected as a rugby referee ²	312	4.33	1.76	120	4.18	1.72	190	4.42	1.78	-1.13
I enjoy being a rugby referee ¹	312	6.18	1.05	120	6.09	1.12	190	6.23	1.01	-1.14
I feel supported by my rugby referees' association ³	312	5.46	1.69	120	5.66	1.55	190	5.33	1.77	1.69
I receive suitable remuneration ²	312	2.54	1.93	120	2.79	1.94	190	2.37	1.89	1.90
I perceive myself as competent ¹	312	5.37	1.45	120	5.02	1.44	190	5.59	1.41	-3.48**
I have the opportunity to be challenged ¹	311	5.35	1.54	119	5.51	1.31	190	5.25	1.67	1.55
I feel that I am obliged to remain ³	311	2.92	1.82	119	2.82	1.86	190	2.98	1.78	-0.77
To be informed about what is happening in my referees' association ⁴	311	3.22	1.87	119	3.37	1.84	190	3.11	1.87	1.19
I have the opportunity to advance ²	311	3.77	2.09	119	4.45	1.94	190	3.32	2.06	4.80***
I feel useful ³	311	5.09	1.59	119	5.03	1.57	190	5.11	1.61	-0.41
I work in a friendly environment ⁴	311	4.71	1.72	119	4.95	1.56	190	4.55	1.80	2.08*
Of the flexibility to choose when I am involved ⁵	311	4.78	1.76	119	4.99	1.62	190	4.63	1.83	1.81
The feelings are similar to playing ⁵	311	3.92	1.96	119	3.82	1.92	190	3.96	1.98	-0.65
I'm more physically suited to refereeing than playing ⁵	311	4.89	2.18	119	4.88	2.08	190	4.88	2.24	0.01

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; ¹Intrinsic motivation; ²Extrinsic motivation; ³Sport-related motivation; ⁴Social motivation; ⁵Role-specific motivation

5.3 Perceived Organisational Support

It was noteworthy that POS items of a more personal nature were rated more highly by SRs than items relating to goals, outcomes, or support more generally (Table 17). Highly rated items captured the extent to which concern was shown ($M=5.89$, $SD=1.44$) and care about well-being ($M=5.10$, $SD=1.56$). Mean scores for ECRs and SRs on items measuring POS were generally quite similar with no significant differences.

5.4 Organisational Commitment

Across the three organisational commitment sub-scales, items measuring affective commitment were rated more highly by ARs than those measuring normative and continuance commitment (Table 18). The item capturing the sentiment about feeling part of the refereeing community had the highest mean score ($M=5.67$, $SD= 1.64$). The item exploring personal investments ($M=2.29$, $SD= 1.66$) had the lowest mean score.

Items measuring affective and continuance commitment had similar mean scores for ECRs and SRs. However, the two items exploring normative commitment had larger means differences which were different across the two groups. SRs ($M=4.53$, $SD=1.86$) were more obliged to remain at their refereeing organisation ($t(296)=-3.07$, $p<.01$) than ECRs ($M=3.84$, $SD=1.91$). SRs ($M=4.59$, $SD=1.88$) also valued loyalty to one organisation more than ECRs ($M=4.14$, $SD=1.92$; $t(296)=-2.24$, $p<.05$).

5.5 Role Commitment

As was the case for OC, items measuring affective aspects of role commitment generally had higher mean scores than normative and continuance commitment items (Table 19). The highest scoring item was '*I am proud to be a rugby referee*' ($M=6.34$, $SD= 1.00$). In contrast, referees agreed much less about continuing on their own volition ($M=2.84$, $SD= 1.87$).

Items measuring affective and continuance RC were similar for ECRs and SRs. However, two of the three items measuring normative commitment had a statistically significant difference between the two groups. SRs ($M=4.42$, $SD=1.86$) had a higher mean score than ECRs ($M=4.88$, $SD=1.79$) in relation to feeling a sense of responsibility to continue as a rugby referee ($t(295)=-2.49$, $p<.05$). Similarly, SRs ($M=4.35$, $SD=1.92$) indicated more loyalty to refereeing than ECRs ($M=3.83$, $SD=1.81$; $t(295)=-2.31$, $p<.05$).

Table 17 - Perceived Organisational Support by Tenure
Perceived Organisational Support by Tenure

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
My referees' association really cares about my well-being	303	5.10	1.56	116	5.23	1.45	185	4.99	1.62	1.32
My referees' association shows very little concern for me (r)	303	5.89	1.44	116	5.99	1.28	185	5.81	1.53	1.06
My referees' association takes pride in my accomplishments as a referee	303	4.82	1.67	116	4.83	1.47	185	4.79	1.78	0.17
My referees' association provides me with sufficient on-field support	303	4.91	1.61	116	4.87	1.50	185	4.92	1.69	-0.28
My referees' association provides me with sufficient off-field support	303	4.80	1.69	116	4.83	1.59	185	4.77	1.75	0.30
My referees' association values my contribution towards its positive outcomes	303	5.13	1.59	116	5.08	1.44	185	5.15	1.68	-0.38
My referees' association strongly considers my goals and values in refereeing	303	4.72	1.70	116	4.74	1.59	185	4.69	1.78	0.24

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; (r) reverse coded item

Table 18 - Organisational Commitment by Tenure
Organisational Commitment by Tenure

Organisational Commitment by Tenure										
Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Affective Commitment										
I don't feel "part of the family" in my referees' association (r)	300	5.67	1.64	115	5.63	1.68	183	5.69	1.63	-0.32
My referees' association has a great deal of personal meaning for me	300	4.58	1.65	115	4.51	1.56	183	4.61	1.71	-0.48
I don't feel a strong sense of belonging to my referees' association (r)	300	5.55	1.71	115	5.44	1.72	183	5.61	1.71	-0.80
Normative Commitment										
One of the major reasons I continue to referee at my referees' association is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain	300	4.27	1.91	115	3.84	1.91	183	4.53	1.86	-3.07**
I was taught to believe in the value of remaining loyal to one organisation	300	4.42	1.91	115	4.14	1.92	183	4.59	1.88	-2.00*
Continuance Commitment										
Right now, staying with my referees' association is a matter of necessity as much as desire ³	300	3.10	1.90	115	3.03	1.89	183	3.16	1.90	-0.61
If I had not already put so much of myself into this referees' association, I might consider quitting ³	300	2.29	1.66	115	2.17	1.62	183	2.38	1.70	-1.05

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; (r) reverse coded item

Table 19 - Role Commitment by Tenure*Role Commitment by Tenure*

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Affective Commitment										
Rugby refereeing is important to my self-image	299	3.38	1.93	114	3.29	1.89	183	3.46	1.95	-0.74
I am proud to be a rugby referee	299	6.34	1.00	114	6.25	1.10	183	6.39	0.94	-1.12
I am enthusiastic about rugby refereeing	299	6.21	1.07	114	6.15	1.20	183	6.25	0.98	-0.76
Normative Commitment										
I believe people who have been trained as a rugby referee have a responsibility to remain a rugby referee	299	3.24	1.73	114	3.18	1.63	183	3.26	1.78	-0.35
I feel a responsibility to rugby refereeing to continue in it	299	4.22	1.85	114	3.88	1.79	183	4.42	1.86	-2.49*
I am a rugby referee because of a sense of loyalty to it	299	4.15	1.90	114	3.83	1.81	183	4.35	1.92	-2.31*
Continuance Commitment										
I have put too much into rugby refereeing to consider stopping ³	299	3.02	1.81	114	2.79	1.64	183	3.15	1.89	-1.75
There are no pressures to stop me being a rugby referee (r) ³	299	2.84	1.87	114	2.85	1.81	183	2.84	1.92	0.04

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; (r) reverse coded item

5.6 Other Organisational Factors

Five additional constructs were measured as part of Study 2 to gain a deeper understanding of how RRAs influence the ECR experience. These were (i) administrator considerations, (ii) continuing education, (iii) coaching, (iv) rewards, and (v) recognition. Analyses indicate several statistically significant differences between ECRs and SRs on these organisational factors (Table 20).

5.6.1 Administrator Considerations

ARs reported positive perceptions of the administrators in their refereeing organisation. The item with the highest mean score related to being considerate of the referees' needs ($M=5.23$, $SD=1.25$).

ECRs ($M=5.25$, $SD=1.68$; $M=5.38$, $SD=1.65$) agreed more strongly than SRs ($M=4.43$, $SD=2.00$; $M=4.34$, $SD=2.09$) as to whether refereeing appointments are not based on “who you know” ($t(277)=3.84$, $p<.001$) or favouritism and politics ($t(286)=4.83$, $p<.001$). ECRs ($M=5.18$, $SD=1.48$; $M=5.32$, $SD=1.82$) also had higher mean scores than SRs ($M=4.64$, $SD=1.77$; $M=4.59$, $SD=2.10$) in relation to refereeing assignments being fair ($t(278)=2.89$, $p<.01$) and administrators not showing favouritism ($t(272)=3.23$, $p<.01$).

5.6.2 Continued Education

Referees felt the education made available to them was generally quite good and prepared them for their role sufficiently ($M=5.49$, $SD=1.47$). There were no significant differences on these items based on tenure.

5.6.3 Access to Coaching

Referees didn't agree strongly with a statement about frequency of one-on-one coaching ($M=3.61$, $SD=2.02$) as compared to other items. This was particularly evident for ECRs ($M=4.90$, $SD=1.75$), who indicated more strongly than SRs ($M=3.87$, $SD=2.11$; $t(279)=4.58$, $p<.001$).

5.6.4 Rewards

The rewards items captured material incentives, contingent rewards, and remuneration. Some respondents agreed that they receive reduced price or free admission to events such as rugby matches run by or with their provincial union ($M=4.23$, $SD=2.15$).

However, they agreed less with the statements which queried financial assistance for further training ($M=1.75$, $SD=1.35$) and receiving fringe benefits ($M=2.64$, $SD=2.00$).

60 (19.7%) respondents indicated that they did receive remuneration. Amongst the 60, 23 were ECRs. For those that did receive remuneration, it was not an important factor in their refereeing experience ($M=1.48$, $SD=1.36$). Similar results were observed by those who did not receive remuneration ($M=3.10$, $SD=2.04$), highlighting that they would not be more motivated to referee if they received remuneration.

Interestingly, ECRs ($M=3.86$, $SD=2.09$) had a slightly higher mean score than SRs ($M=3.26$, $SD=2.06$) in relation to refereeing being a good source of supplementary income ($t(236)=2.19$, $p<.05$).

5.6.5 Recognition

Overall, respondents indicated that they felt recognised by their RRA. Referees also felt appreciated ($M=5.11$, $SD=1.75$) and recognised the way they should ($M=5.08$, $SD=1.79$). No means score differences were observed between ECRs and SRs.

Table 20 – Other Organisational Factors by Tenure
Other Organisational Factors by Tenure

Variables	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Perceptions of Administrators										
Refereeing assignments are distributed based on "who you know" (r)	306	4.75	1.92	117	5.25	1.68	187	4.43	2.00	3.84***
Refereeing assignments are based on favouritism and politics (r)	306	4.74	1.99	117	5.38	1.65	187	4.34	2.09	4.83***
Administrators in my referees' association are considerate of my needs	306	5.23	1.53	117	5.39	1.34	187	5.12	1.63	1.60
Decisions related to refereeing assignments are fair	306	4.85	1.68	117	5.18	1.48	187	4.64	1.77	2.89**
Administrators in my referees' association show favouritism (r)	306	4.87	2.02	117	5.32	1.82	187	4.59	2.10	3.23**
Continued Education										
I receive adequate training each year to stay current on refereeing mechanics and the laws of rugby	306	5.46	1.45	117	5.41	1.49	187	5.48	1.43	-0.38
Because of the continuing education provided by my referees' association, I feel prepared to referee rugby	306	5.49	1.47	117	5.55	1.42	187	5.44	1.51	0.62
Training prepared me for interactions with coaches, players, and fans	306	4.75	1.68	117	4.78	1.53	187	4.70	1.77	0.40
Access to Coaching										
I receive one-on-one coaching frequently	305	3.61	2.02	117	3.93	1.86	186	3.39	2.09	2.34*
I would like more one-on-one coaching	305	4.28	2.04	117	4.90	1.75	186	3.87	2.11	4.58***
I receive sufficient one-on-one coaching	305	4.24	2.03	117	4.03	1.85	186	4.37	2.12	-1.47

Variables	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Incentives										
I receive financial assistance for further training	305	1.75	1.35	117	1.76	1.23	186	1.75	1.42	0.05
I receive fringe benefits (e.g., reduced membership fees)	305	2.64	2.00	117	2.76	1.96	186	2.55	2.00	0.91
I receive reduce price/free admission to events run by/with my provincial union	305	4.23	2.15	117	4.39	2.04	186	4.12	2.21	1.07
Remuneration										
My main motivation for refereeing is financial reward	60	1.47	1.05	23	1.70	1.40	37	1.32	0.75	1.34
Pay was an important factor in my decision to start refereeing	60	1.48	1.36	23	2.13	2.03	37	1.08	0.28	2.47*
Refereeing is a good source of supplementary income	60	1.75	1.48	23	2.09	1.93	37	1.54	1.10	1.24
Money is the primary reason I referee	60	1.17	0.69	23	1.30	1.06	37	1.08	0.28	0.99
I would be more motivated to officiate if I received a financial reward	240	3.10	2.04	94	3.35	1.99	144	2.97	2.07	1.41
If I was financially rewarded, refereeing would be a good source of supplementary income	240	3.50	2.08	94	3.86	2.09	144	3.26	2.06	2.19*
Recognition										
I feel I have received a fair amount of recognition for being a referee	303	4.91	1.53	116	4.80	1.38	185	4.98	1.61	-1.01
When I do a good job, I receive the recognition for it that I should	302	4.72	1.57	115	4.82	1.48	185	4.64	1.63	0.93
I don't feel the work I do is appreciated (r)	303	5.11	1.75	116	5.15	1.81	185	5.10	1.71	0.24
I don't feel my efforts are recognised the way they should be (r)	299	5.08	1.79	114	5.18	1.74	183	5.02	1.82	0.72

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; (r) reverse coded item

5.7 Sense of Community (SoC)

Generally, ARs perceive that a sense of community exists (Table 21). Although modest in practical terms, SRs felt more included in their refereeing community ($M=5.61$, $SD=1.44$) than ECRs ($M=5.22$, $SD=1.49$; $t(299)=-2.24$, $p<.05$).

5.8 Abuse

Overall, mean scores for the abuse items were relatively low (Table 22). This was highlighted by the results for the '*I often feel abused*' ($M=3.25$, $SD=1.73$) and '*I often encounter hostile interactions with coaches and/or spectators while refereeing*' ($M=3.18$, $SD=1.71$) items. Reports of abuse and hostile interactions were similar for ECRs and SRs, but stress was different based on tenure. SRs ($M=2.53$, $SD=1.45$) felt less stressed ($t(218)=3.18$, $p<.01$) than ECRs ($M=3.34$, $SD=1.73$).

5.9 Intention to Continue (ITC)

Items measuring ITC show that many referees intend to continue in the role. Mean scores for all three items measuring ITC were quite similar for ECRs and SRs (Table 23).

Table 21 – Sense of Community by Tenure*Sense of Community by Tenure*

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
A strong sense of community among referees exists for me ⁸	303	5.37	1.42	116	5.24	1.32	185	5.44	1.48	-1.17
I feel included in the refereeing community ⁸	303	5.47	1.47	116	5.22	1.49	185	5.61	1.44	-2.24*
I belong to a strong refereeing community ⁸	303	5.45	1.45	116	5.39	1.42	185	5.48	1.48	-0.54

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ **Table 22 – Abuse by Tenure***Abuse by Tenure*

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
I often feel abused while refereeing	310	3.25	1.73	119	3.23	1.70	189	3.26	1.75	-0.16
I often encounter hostile interactions with coaches and/or spectators while refereeing	310	3.18	1.71	119	3.17	1.65	189	3.17	1.76	-0.03
I often feel a lot of stress while refereeing	310	2.76	1.59	119	3.13	1.73	189	2.53	1.45	3.18**

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ **Table 23 - Intention to Continue by Tenure***Intention to Continue by Tenure*

Items	All Referees			Early-Career			Seasoned Referees			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
I intend to continue refereeing rugby past the end of this season	298	6.18	1.35	114	6.25	1.34	182	6.13	1.36	0.70
I expect to referee rugby past the end of this season	298	6.06	1.47	114	6.04	1.49	182	6.07	1.47	-0.13
I want to referee past the end of the season	298	6.16	1.43	114	6.13	1.54	182	6.17	1.37	-0.23

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

5.10 Relationships Amongst the Constructs

Having now presented descriptives and group difference analyses for SRs and ECRs on the constructs of interest, the focus shifts to exploring relationships among the constructs, which builds on previous research and adds value to the body of related literature. These analyses are presented in the following sections and organised around four foci:

1. The Motivation-ITC relationship
2. The intervening effect of POS, OC, and RC on the Motivation-ITC relationship
3. Other organisational factors which influence referee ITC
4. The intervening effect of SoC on the Abuse-ITC relationship

Binary Logistic Regression (BLR) was used to explore these various relationships as ITC is a dichotomous outcome variable in each case. Composite variables were created for these analyses (Table 24). Cronbach's Alpha analyses were undertaken to calculate the reliability of the composite variables. Of note, continuing sport-related motivation, role-specific motivation, and continuance role commitment were lower than 0.5. As a result, it was determined that these composite variables were not appropriate for subsequent analyses. For the Access to Coaching composite variable, one variable relating to wanting more one-on-one coaching was removed to improve reliability. Distinctions between ECRs and SRs on the composite variables were also assessed.

Based on the magnitude of the respective composite variables, intrinsic motivation inclusive of both onset and continuing subscales ($M=5.06$, $SD=1.03$) was the strongest motivation for ARs. Among the onset motivation subscales, sport-related motivation ($M=4.94$, $SD=1.18$) was the strongest, and for the continuing subscale, it was intrinsic motivation ($M=5.30$, $SD=1.09$). The full sample of ARs also reported relatively strong perceptions of organisational support ($M=5.05$, $SD=1.33$) and ITC ($M=6.14$, $SD=1.33$). When referee tenure was distinguished, only two quite modest dimension-level motivational differences emerged. ECRs ($M=3.07$, $SD=1.16$) reported stronger extrinsic motivation than SRs ($M=2.81$, $SD=1.11$), $t(307)=2.01$, $p<.05$. Similarly, ECRs ($M=3.87$, $SD=1.36$) reported higher continuing extrinsic motivation scores than SRs ($M=3.52$, $SD=1.39$), $t(307)=2.19$, $p<.05$. Regarding the other organisational factors, ECRs ($M=5.31$, $SD=1.28$) perceived administrator considerations more positively ($t(285)=4.09$, $p<.001$) in contrast to SRs ($M=4.62$, $SD=1.61$).

Table 24 - Composite Variables
Composite Variables

Composite Variable	α	All Referees			Early-Career			Seasoned Referees			t
		n	M	SD	n	M	SD	n	M	SD	
Intrinsic Motivation	0.86	311	5.06	1.03	119	5.10	1.05	190	5.03	1.02	0.55
Onset	0.77	314	4.81	1.17	121	4.90	1.21	191	4.75	1.14	1.14
Continuing	0.83	311	5.30	1.09	119	5.28	1.06	190	5.32	1.12	-0.30
Extrinsic Motivation	0.82	311	2.92	1.14	119	3.07	1.16	190	2.81	1.11	2.01*
Onset	0.79	314	2.32	1.2	121	2.43	1.27	191	2.25	1.15	1.32
Continuing	0.69	311	3.66	1.39	119	3.87	1.36	190	3.52	1.39	2.19*
Sport Related Motivation	0.81	311	4.84	1.03	119	4.88	0.99	190	4.81	1.05	0.54
Onset	0.82	314	4.94	1.18	121	4.96	1.15	191	4.93	1.20	0.25
Continuing	0.41	311	4.15	1.29	119	4.51	1.16	190	4.47	1.14	0.26
Social Motivation	0.82	311	4.15	1.29	119	4.24	1.21	190	4.08	1.33	1.07
Onset	0.76	314	4.13	1.44	121	4.22	1.39	191	4.07	1.47	0.94
Continuing	0.60	311	4.17	1.41	119	4.26	1.34	190	4.11	1.34	0.92
Role Specific Motivation	0.40	311	5.06	1.03	119	5.10	1.05	190	5.03	1.02	0.55
Abuse	0.83	310	3.07	1.44	119	3.18	1.51	189	2.99	1.41	1.12
Administrator Considerations	0.89	306	4.89	1.52	117	5.31	1.28	187	4.62	1.61	4.09***
Continued Education	0.85	306	5.23	1.35	117	5.25	1.33	187	5.20	1.36	0.25
Access to Coaching	0.77	305	3.92	1.82	117	3.98	1.71	186	3.88	1.89	0.46**
Rewards											
Incentives	0.60	305	2.87	1.39	117	2.97	1.33	186	2.81	1.41	1.00
Remuneration	0.76	300	2.93	1.86	117	3.25	1.88	181	2.73	1.83	2.36*
Recognition	0.76	298	4.95	1.27	113	5.00	1.25	183	4.93	1.28	0.45
Sense of Community	0.88	303	5.43	1.30	116	5.28	1.29	185	5.51	1.31	-1.46

Composite Variable	α	All Referees			Early-Career			Seasoned Referees			t
		n	M	SD	n	M	SD	n	M	SD	
Perceived Organisational Support	0.92	303	5.05	1.33	116	5.08	1.18	185	5.02	1.43	0.40
Organisational Commitment											
Affective Commitment	0.68	300	5.26	1.30	115	5.19	1.30	183	5.30	1.31	-0.69
Normative Commitment	0.76	300	4.35	1.71	115	3.99	1.76	183	4.56	1.64	-2.83**
Continuance Commitment	0.56	300	2.70	1.48	115	2.60	1.45	183	2.77	1.50	-0.98
Role Commitment											
Affective Commitment	0.54	299	5.31	1.01	114	5.23	1.05	183	5.36	0.99	-1.11
Normative Commitment	0.84	299	3.87	1.59	114	3.63	1.58	183	4.01	1.58	-2.00
Continuance Commitment	0.05	299	2.93	1.32	114	2.82	1.24	183	3.00	1.37	-1.12
Intention to Continue	0.93	298	6.14	1.33	114	6.14	1.34	182	6.12	1.33	0.11

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

5.10.1 The Motivation-ITC Relationship

Relationships between motivation dimension composite variables and ITC were initially tested individually (i.e., as either onset or continuing) and then together to develop a nuanced understanding of this very important relationship. Initially, univariate BLR was undertaken to assess motivation dimensional direct effects with ITC (Table 25). The odds ratios reported in the following sections indicate how much more likely referees are to continue for every one unit increase of motivation on the seven-point scale. For ARs, intrinsic motivation ($OR=1.97$, 95% $CI=1.50-2.58$) had a positive relationship with ITC. Extrinsic motivation ($OR=1.43$, 95% $CI=1.10-1.86$), sport-related motivation ($OR=1.41$, 95% $CI=1.09-1.83$) and social motivation ($OR=1.36$, 95% $CI=1.10-1.68$) also had weaker, but nonetheless statistically significant positive relationships with ITC. For ARs, onset intrinsic motivation ($OR=1.49$, 95% $CI=1.18-1.87$), onset sport-related motivation ($OR=1.29$, 95% $CI=1.03-1.61$), and onset social motivation ($OR=1.25$, 95% $CI=1.04-1.50$) had a positive relationship with ITC. Continuing intrinsic motivation ($OR=2.14$, 95% $CI=1.64-2.79$), continuing extrinsic motivation ($OR=1.38$, 95% $CI=1.13-1.70$), and continuing social motivation ($OR=1.35$, 95% $CI=1.11-1.63$) all had a positive relationship with ITC.

Next, motivation dimensions and their relationships with ITC were explored by referee tenure. ECRs differed from ARs on several of the combined motivation dimension composite variables and their relationships with ITC. For ECRs, intrinsic motivation ($OR=1.91$, 95% $CI=1.25-2.94$), extrinsic motivation ($OR=1.57$, 95% $CI=1.02-2.41$) and sport-related motivation ($OR=1.70$, 95% $CI=1.10-2.64$) had a positive and significant relationship with ITC. For the onset motivation subscale, onset intrinsic motivation ($OR=1.46$, 95% $CI=1.03-2.08$) and sport-related motivation ($OR=1.53$, 95% $CI=1.04-2.25$) had a statistically significant relationship with ITC. Whereas for the continuing motivation subscales, continuing intrinsic motivation ($OR=2.18$, 95% $CI=1.40-3.40$), continuing extrinsic motivation ($OR=1.57$, 95% $CI=1.12-2.22$), and continuing social motivation ($OR=1.42$, 95% $CI=1.03-1.97$) all had a positive relationship with ITC. The SR group had less similarities with ARs as intrinsic motivation ($OR=2.02$, 95% $CI=1.41-2.89$) and social motivation ($OR=1.36$, 95% $CI=1.04-1.77$) also had a positive relationship with ITC. For SRs, onset intrinsic motivation ($OR=1.52$, 95% $CI=1.12-2.06$) and onset social motivation ($OR=1.28$, 95% $CI=1.01-1.62$) had a positive relationship with ITC. For SRs, both continuing intrinsic motivation ($OR=2.11$, 95% $CI=1.51-2.95$) and continuing social motivation ($OR=1.30$, 95% $CI=1.02-1.66$) had a positive relationship with ITC.

While it was evident that several motivation dimensions influenced continuation individually, it was also important to consider this simultaneously (Table 26). Multivariable BLR was used to assess the effect of onset and continuing motivation on ITC while controlling for other motivation dimensions. For ARs ($OR=2.53$, 95% $CI=1.59-4.01$) and SRs ($OR=2.90$, 95% $CI=1.58-5.31$), intrinsic motivation had a statistically significant positive relationship with ITC after controlling for extrinsic, sport-related, and social motivation.

Onset intrinsic motivation ($OR=1.48$, 95% $CI=1.05-2.09$) had a statistically significant relationship with ITC for ARs but not separately for either ECRs or SRs. Continuing intrinsic motivation had a statistically significant relationship with ITC for ARs ($OR=2.44$, 95% $CI=1.66-3.56$), ECRs ($OR=2.16$, 95% $CI=1.14-4.09$), and SRs ($OR=2.63$, 95% $CI=1.63-4.26$) controlling for extrinsic and social motivation. Overall, results indicate that intrinsic motivation has an important role to play in continuation for ARs at both the onset and continuing stages of their careers.

Table 25 - Motivation Univariate Effects with ITC*Motivation Univariate Effects with ITC*

Composite Variables	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Intrinsic Motivation	1.97***	1.50	2.58	1.91**	1.25	2.94	2.02***	1.41	2.89
Onset	1.49***	1.18	1.87	1.46*	1.03	2.08	1.52**	1.12	2.06
Continuing	2.14***	1.64	2.79	2.18***	1.40	3.40	2.11***	1.51	2.95
Extrinsic Motivation	1.43**	1.10	1.86	1.57*	1.02	2.41	1.35	0.96	1.89
Onset	1.23	0.96	1.57	1.25	0.86	1.81	1.22	0.87	1.69
Continuing	1.38**	1.13	1.70	1.57*	1.12	2.22	1.29	0.99	1.67
Sport Related Motivation	1.41**	1.09	1.83	1.70*	1.10	2.64	1.27	0.92	1.76
Onset	1.29*	1.03	1.61	1.53*	1.04	2.25	1.17	0.88	1.55
Social Motivation	1.36**	1.10	1.68	1.38	0.97	1.96	1.36*	1.04	1.77
Onset	1.25*	1.04	1.50	1.20	0.89	1.62	1.28*	1.01	1.62
Continuing	1.35**	1.11	1.63	1.42*	1.03	1.97	1.30*	1.02	1.66

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 26 - Motivation Multivariable Effects with ITC*Motivation Multivariable Effects with ITC*

Motivation	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Intrinsic Motivation	2.53***	1.59	4.01	2.06	1.00	4.25	2.90***	1.58	5.31
Extrinsic Motivation	0.86	0.57	1.29	1.01	0.55	1.86	0.74	0.42	1.30
Sport Related Motivation	1.06	0.75	1.49	1.32	0.75	2.31	0.94	0.60	1.46
Social Motivation	0.83	0.58	1.20	0.77	0.43	1.38	0.89	0.55	1.45
<u>Onset</u>									
Intrinsic Motivation	1.48*	1.05	2.09	1.29	0.87	1.91	1.48	0.97	2.26
Extrinsic Motivation	0.93	0.69	1.27						
Sport Related Motivation	1.09	0.83	1.43	1.35	0.88	2.08			
Social Motivation	1.00	0.76	1.30				1.03	0.74	1.44
<u>Continuing</u>									
Intrinsic Motivation	2.44***	1.66	3.56	2.16*	1.14	4.09	2.63***	1.63	4.26
Extrinsic Motivation	0.92	0.67	1.26	1.10	0.66	1.83	0.80	0.53	1.21
Social Motivation	0.93	0.69	1.24	0.92	0.57	1.47	0.75	0.65	1.37

5.10.2 POS, OC, and RC

Interaction terms were specified in the BLR analyses to explore the moderating effect of POS, OC, and RC on motivation-ITC relationships. Initially, univariate BLR was undertaken to assess perceived organisational support direct effects with ITC. Perceived organisational support had a positive relationship with ITC for ARs ($OR=1.31$, 95% $CI=1.08-1.60$) and ECRs ($OR=1.61$, 95% $CI=1.11-2.33$) but not for SRs.

Interaction terms were specified in the BLR analyses to explore the moderating effect of POS and dimensions of OC and RC on the motivation-ITC relationships. For ARs, POS interacted with sport-related motivation ($p<.01$). This means that the strength of the relationship between sport-related motivation and ITC depends on the level of POS. The POS interaction term was not significant for the intrinsic-ITC, extrinsic-ITC, and social-ITC motivation relationships. Next, moderation effects of POS on motivation dimensions were explored by tenure. POS did not moderate any motivation dimension-ITC relationships for ECRs. In contrast, significant POS interactions did emerge for SRs. Like the wider AR group, POS was found to interact with sport-related motivation ($p=.01$; Table 27).

Three dimensions of OC were tested with ITC (Table 28). Univariate results indicate that only the continuance component of OC had a relationship with ITC. This relationship is negative for ARs ($OR=0.71$, 95% $CI=0.59-0.84$), ECRs ($OR=0.70$, 95% $CI=0.53-0.94$) and SRs ($OR=0.71$, 95% $CI=0.56-0.89$).

OC interactions were tested for all the motivation-ITC relationships for each component of OC (Table 29). No significant relationships were found in these analyses.

Two dimensions of role commitment were tested with ITC (Table 30). Univariate analyses results indicate that affective commitment had a relationship with ITC. Affective commitment has a positive relationship with ITC for ARs ($OR=2.28$, 95% $CI=1.68-3.10$), ECRs ($OR=2.34$, 95% $CI=1.45-3.79$) and SRs ($OR=2.27$, 95% $CI=1.52-3.38$).

RC interactions were tested for all the motivation-ITC relationships for each dimension (Table 31). Several interactions were significant for ARs. However, only one interaction was significant for ECRs, and none for SRs.

For ARs, affective commitment interacted with intrinsic-ITC ($p=.02$), extrinsic-ITC ($p=.02$), sport-related-ITC ($p=.03$), and social-ITC relationships ($p=.03$). Furthermore, it also interacted with the continuing intrinsic-ITC ($p=.02$) and continuing social-ITC ($p=.02$) relationships. Overall, POS did play a part in the social motivation-ITC relationship for ARs and SRs, but no interactions were observed for OC. Various dimensions of RC interacted with all four motivation dimensions.

Table 27 – POS & Motivation Interactions on ITC
POS & Motivation Interactions on ITC

Interactions	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Perceived Organisational Support	1.31**	1.08	1.60	1.61*	1.11	2.33	1.21	0.95	1.52
Intrinsic Motivation*POS	0.83	0.67	1.03	0.68	0.44	1.04	0.87	0.67	1.12
Continuing Intrinsic Motivation*POS	0.92	0.75	1.12	0.72	0.46	1.12	0.97	0.78	1.21
Extrinsic Motivation*POS	0.86	0.71	1.05	0.94	0.64	1.38	0.82	0.64	1.04
Continuing Extrinsic Motivation*POS	0.94	0.81	1.10	1.12	0.79	1.57	0.88	0.73	1.06
Sport Related Motivation*POS	0.74**	0.60	0.92	0.80	0.54	1.17	0.72*	0.55	0.93
Social Motivation*POS	0.96	0.84	1.11	1.00	0.74	1.36	0.92	0.78	1.10
Continuing Social Motivation*POS	0.94	0.82	1.07	1.00	0.75	1.33	0.90	0.77	1.06

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 28 - Organisational Commitment with ITC
Organisational Commitment with ITC

Organisational Commitment	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Affective	1.18	0.96	1.44	1.23	0.89	1.70	1.14	0.88	1.47
Normative	0.94	0.80	1.10	0.98	0.77	1.25	0.90	0.73	1.12
Continuance	0.71***	0.59	0.84	0.70*	0.53	0.94	0.71**	0.56	0.89

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 29 – OC & Motivation Interactions on ITC
OC & Motivation Interactions on ITC

Interactions	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Intrinsic Motivation*OC-A	0.86	0.69	1.07	0.78	0.55	1.10	0.91	0.68	1.23
Continuing Intrinsic Motivation*OC-A	0.88	0.72	1.07	0.70	0.59	1.01	0.99	0.77	1.27
Intrinsic Motivation*OC-N	1.01	0.87	1.18	1.10	0.85	1.42	0.95	0.77	1.17
Continuing Intrinsic Motivation*OC-N	0.97	0.83	1.14	1.02	0.79	1.32	0.94	0.76	1.17
Intrinsic Motivation*OC-C	1.07	0.89	1.29	1.26	0.89	1.79	0.99	0.79	1.24
Continuing Intrinsic Motivation*OC-C	1.04	0.87	1.25	1.16	0.84	1.62	0.92	0.80	1.24
Extrinsic Motivation*OC-A	0.93	0.77	1.14	0.90	0.66	1.24	0.93	0.72	1.21
Continuing Extrinsic Motivation*OC-A	0.97	0.84	1.13	1.01	0.80	1.29	0.93	0.77	1.14
Extrinsic Motivation*OC-N	0.97	0.83	1.14	1.04	0.81	1.34	0.91	0.73	1.14
Continuing Extrinsic Motivation*OC-N	1.01	0.90	1.14	1.06	0.87	1.31	0.99	0.84	1.16
Extrinsic Motivation*OC-C	1.02	0.87	1.19	1.06	0.80	1.40	1.02	0.84	1.23
Continuing Extrinsic Motivation*OC-C	1.06	0.93	1.21	1.18	0.91	1.54	1.03	0.88	1.21
Sport Related Motivation*OC-A	0.86	0.72	1.03	0.91	0.68	1.23	0.82	0.65	1.04
Sport Related Motivation*OC-N	1.06	0.91	1.23	1.29	0.97	1.72	0.97	0.79	1.17
Sport Related Motivation*OC-C	1.06	0.90	1.24	1.07	0.79	1.45	1.06	0.88	1.28
Social Motivation*OC-A	0.93	0.80	1.07	0.88	0.70	1.10	0.95	0.79	1.15
Continuing Social Motivation*OC-A	0.92	0.81	1.06	0.88	0.71	1.10	0.94	0.80	1.11
Social Motivation*OC-N	1.05	0.92	1.19	1.25	0.98	1.59	0.96	0.81	1.14
Continuing Social Motivation*OC-N	1.03	0.91	1.16	1.13	0.92	1.40	0.99	0.84	1.16
Social Motivation*OC-C	1.07	0.93	1.21	1.25	0.97	1.60	1.00	0.85	1.17
Continuing Social Motivation*OC-C	1.11	0.97	1.26	1.20	0.96	1.49	1.07	0.91	1.26

Note: OC-A – Affective Organisational Commitment, OC-N - Normative Organisational Commitment, OC-C - Continuance Organisational Commitment

Table 30 - Role Commitment with ITC
Role Commitment with ITC

	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Role Commitment									
Affective	2.28***	1.68	3.10	2.34***	1.45	3.79	2.27***	1.52	3.38
Normative	1.07	0.91	1.27	1.16	0.88	1.52	1.01	0.82	1.26

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 31 – RC & Motivation Interactions on ITC
RC & Motivation Interactions on ITC

Interactions	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Intrinsic Motivation*RC-A	0.68*	0.49	0.94	0.63	0.36	1.10	0.69	0.46	1.03
Continuing Intrinsic Motivation*RC-A	0.70*	0.51	0.95	0.62	0.36	1.09	0.73	0.51	1.05
Intrinsic Motivation*RC-N	1.00	0.85	1.18	1.09	0.83	1.45	0.93	0.74	1.16
Continuing Intrinsic Motivation*RC-N	0.92	0.78	1.10	0.99	0.73	1.34	0.88	0.71	1.09
Extrinsic Motivation*RC-A	0.73*	0.57	0.94	0.73	0.49	1.10	0.72	0.52	1.00
Continuing Extrinsic Motivation*RC-A	0.84	0.68	1.04	0.95	0.66	1.36	0.78	0.60	1.02
Extrinsic Motivation*RC-N	0.94	0.81	1.09	1.08	0.83	1.41	0.85	0.70	1.04
Continuing Extrinsic Motivation*RC-N	0.96	0.85	1.09	1.06	0.85	1.31	0.91	0.77	1.06
Sport Related Motivation*RC-A	0.70*	0.51	0.97	0.71	0.42	1.22	0.68	0.45	1.03
Sport Related Motivation*RC-N	1.01	0.86	1.19	1.23	0.91	1.68	0.92	0.76	1.13
Social Motivation*RC-A	0.77*	0.61	0.98	0.65	0.40	1.03	0.82	0.61	1.09
Continuing Social Motivation*RC-A	0.77*	0.62	0.95	0.69	0.47	1.02	0.81	0.62	1.07
Social Motivation*RC-N	0.95	0.85	1.08	1.07	0.86	1.35	0.88	0.75	1.03
Continuing Social Motivation*RC-N	0.96	0.85	1.08	1.04	0.84	1.29	0.91	0.78	1.06

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; RC-A – Affective Role Commitment, RC-N Normative Role Commitment

5.10.3 Other Organisational Factors and ITC

Five elements characterised as other organisational factors were explored to assess their respective relationships with ITC. Initially, a univariate analysis was conducted. In the multivariable analyses that followed, variables which met 0.2 probability cut-off thresholds were tested together.

For ARs, continued education ($OR=1.46$, 95% $CI=1.20-1.79$), access to coaching ($OR=1.61$, 95% $CI=1.28-2.04$) and recognition ($OR=1.40$, 95% $CI=1.14-1.73$) all had a positive and significant relationship with ITC (Table 32). Results were similar for ECRs and SRs.

For variables that met the 0.2 probability threshold, a multivariable BLR was conducted (Table 33). For ARs, continued education ($OR=1.34$, 95% $CI=1.06-1.70$), and access to coaching ($OR=1.47$, 95% $CI=1.13-1.92$), explained the relationship with ITC. However, for SRs, remuneration ($OR=1.28$, 95% $CI=1.01-1.61$) explains the relationship with ITC. No other results between the constructs and ITC were found to be statistically significant for ECRs.

Table 32 - Other Organisational Factors Univariate Effects on ITC*Other Organisational Factors Univariate Effects on ITC*

Composite Variables	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Administrator Considerations	1.12	0.95	1.33	1.34	0.97	1.85	1.06	0.86	1.31
Continued Education	1.46***	1.20	1.79	1.48*	1.08	2.02	1.44**	1.12	1.87
Access to Coaching	1.37***	1.16	1.60	1.34*	1.03	1.75	1.38**	1.13	1.69
Rewards - Incentives	1.14	0.94	1.40	1.31	0.93	1.85	1.06	0.83	1.36
Rewards - Remuneration	1.07	0.92	1.25	0.96	0.77	1.21	1.17	0.95	1.45
Recognition	1.40**	1.14	1.73	1.53*	1.08	2.16	1.34*	1.02	1.75

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ **Table 33 - Other Organisational Factors Multivariable Effects with ITC***Other Organisational Factors Multivariable Effects on ITC*

Composite Variables	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Administrator Considerations	0.89	0.72	1.09	1.09	0.73	1.62			
Continued Education	1.33*	1.05	1.68	1.30	0.91	1.85	1.34	0.97	1.85
Access to Coaching	1.27*	1.05	1.52	1.15	0.87	1.54	1.24	0.99	1.57
Rewards - Incentives	0.92	0.73	1.15	1.13	0.77	1.64			
Rewards - Remuneration							1.28*	1.01	1.61
Recognition	1.27	0.99	1.62	1.34	0.88	2.03	1.15	0.83	1.60

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

5.10.4 Abuse and Sense of Community

The relationships of Abuse and SoC with ITC were initially analysed separately. Further analyses explored the interaction effect of SoC on the abuse-ITC relationship.

Abuse was not found to have a relationship with ITC for ARs, ECRs or SRs (Table 34). However, SoC did for ARs ($OR=1.48$, 95% $CI=1.21-1.82$), ECRs ($OR=1.59$, 95% $CI=1.59-2.23$) and SRs ($OR=1.41$, 95% $CI=1.09-1.83$).

Furthermore, it was found that SoC influences the relationship between Abuse and ITC for ARs ($p=0.02$) and ECRs ($p=0.02$), but not for SRs (Table 35).

Table 34 – Abuse and Sense of Community Univariate Effects with ITC*Abuse and Sense of Community Univariate Effects with ITC*

Composite Variables	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Abuse	0.88	0.74	1.06	0.78	0.59	1.04	0.96	0.75	1.23
Sense of Community	1.48***	1.21	1.82	1.59**	1.13	2.23	1.41**	1.09	1.83

Note: * $p < .05$; ** $p < .01$; *** $p < .001$ **Table 35 - Abuse-Sense of Community Interaction***Abuse-Sense of Community Interaction*

Interaction	All Referees			Early-Career			Seasoned Referees		
	Exp(B)	95% CI		Exp(B)	95% CI		Exp(B)	95% CI	
		Lower	Upper		Lower	Upper		Lower	Upper
Abuse*Sense of Community	0.84*	0.73	0.97	0.74*	0.58	0.95	0.91	0.76	1.09

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

5.11 Discussion

As outlined earlier, there were four main foci for the multi-construct analyses in this study. The foci were the motivation-ITC relationship, POS/OC/RC and the motivation-ITC relationship, other organisational factors, and ITC, and finally, the influence of SoC on the abuse-ITC relationship. Each of the foci allowed for exploration of different elements of the referee experience, adding to the body of literature along the way. The findings from analyses within each of these foci are discussed in the following sections.

5.11.1 Motivation-ITC Relationship

Several iterations of the motivation-ITC relationship were explored in this study. This includes motivation dimensions, motivation at two distinct phases of the referee journey (i.e., onset and on a continuing basis), as well as exploring any distinctions between ECRs and SRs on the relationship.

First, it is worth reflecting on the motivation of ARs, including *both* ECRs and SRs. This study analysed and reported data for the AR group, allowing for direct comparison with other reported research in which ECRs and SRs have not been distinguished. Intrinsic motivation was the strongest of the four dimensions, which is consistent with related literature (Auger et al., 2010; Bernal et al., 2012; Kellett & Warner, 2011; Livingston et al., 2017; Livingston & Forbes, 2017, 2016; Ridinger, Kim, et al., 2017). As was expected, referees in this study conveyed that passion and enjoyment are important drivers.

Sport-related was the strongest dimension among the onset motivation subscales, which includes drivers such as giving back and responding to the needs of the community, was unexpected as others have highlighted intrinsic motivation as most closely linked to initial participation (Auger et al., 2010; Hancock et al., 2015; Livingston & Forbes, 2017, 2016). In other words, motivation linked to the sport, such as wanting to contribute, giving back, filling a gap, and remaining active within the sport, is stronger than one's internal drivers at the onset of a referee's career.

For the continuing motivation subscales, intrinsic motivation was reported as strongest, consistent with related literature linking continuing intrinsic motivation to referees remaining in their roles (Hancock et al., 2015; Livingston & Forbes, 2017). In this study, continuing extrinsic motivation was weakest of the three continuing motivation dimensions that were included, consistent with studies elsewhere reporting that extrinsic

motivation elements such as power, prestige and remuneration were less important drivers of continuing as a referee (Bernal et al., 2012; Fowler et al., 2019).

For ARs, intrinsic motivation (including onset and continuing items) was the only dimension positively related to ITC when controlling for the others, consistent with other research (Giel & Breuer, 2020; S. Kim, 2017; Ridinger, Kim, et al., 2017). However, in the univariate analyses, extrinsic motivation, sport-related motivation, and social motivation all had a positive relationship with ITC, albeit to a lesser extent than intrinsic motivation. These dimensions being relevant in driving ITC is consistent with the literature (Livingston & Forbes, 2017). The conclusion here is that while other motivation dimensions may influence referee behaviour, intrinsic motivation ultimately is the most robust driver of a referee's continued engagement. When considering the subscales, onset intrinsic motivation, onset sport-related motivation and onset social motivation were separately found to drive ITC. Continuing intrinsic motivation, continuing extrinsic motivation, and continuing social motivation were also positively associated with ITC. Although this is the first time that onset and continuing referee motivation have been an explicit focus, there was evidence elsewhere foreshadowing that intrinsic motivation (Giel & Breuer, 2020; Ridinger, Kim, et al., 2017), extrinsic motivation (Livingston & Forbes, 2016; Ridinger, 2015), and social motivation (Baldwin & Vallance, 2016a; Bernal et al., 2012) are all positively associated with ITC.

Contrasting subgroups by tenure for the first time has generated new insights that contribute to the evolving understanding of organisational aspects of the referee experience and, specifically, the vitally important motivation-ITC relationship. ECRs reported slightly higher mean scores for extrinsic motivation and continuing extrinsic motivation compared to SRs, suggesting that when starting, ECRs are more outwardly motivated than they might be later in their career. This may relate to thoughts early on about career advancement (Bernal et al., 2012). For ECRs, continuing extrinsic motivation was a significant predictor of ITC, while for SRs, it was not. This suggests that extrinsic motivation elements such as recognition may more explicitly link to an ECRs ITC than SRs. A lack of recognition being related to officials discontinuing has been reported elsewhere (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017) but the new insight here is that the phenomenon is more pronounced for those new to officiating and encourages continued participation. In New Zealand, some refereeing organisations provide a badge after ECRs complete three games as a sign of appreciation, thereby comprising an extrinsic reward.

5.11.2 POS, OC, and RC

ARs reported comparatively strong POS, as only intrinsic and continuing intrinsic motivation had higher mean scores. This is noteworthy given it is known that strong perceived organisational support is related to career commitment (S. Kim, 2017). Perceived organisational support was also found to have a relationship with ITC for ARs, which is consistent with previous research (Choi & Chiu, 2017; Giel & Breuer, 2020; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016) and which justified the moderation analyses that follows. The perceived organisational support mean scores and ITC direct effects reported here suggest that this sample of referees (i.e., ARs and ECRs) felt supported, and this is positively associated with their continued involvement. Subsequent analyses of perceived organisational support interaction effects alongside motivation dimensions, consideration of tenure and the continuing motivation subscale will reveal further insights about this.

ECR-SR differences also emerged on the direct relationship between POS and ITC. Although the relationship was significant for the full AR and ECR samples, it was not for SRs. This finding is contrary to what has been reported in the majority of the refereeing literature, as it has been found that POS influences ITC for officials (Choi & Chiu, 2017; Giel & Breuer, 2020; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016). However, the single study focussing on ECRs also reported that POS was not related to ITC (Cuskelly & Hoyer, 2013), contrary to the findings of this study. This highlights that referees are not a homogenous group and that tenure is an important factor.

Moving on from POS and motivational dimension direct effects on ITC, which were expected, the focus was then on the potentially moderating role of POS. Based on what is reported elsewhere and intuitive appeal, it is argued that POS (a perception of an external aspect of the experience) would interact with dimensions of motivation (primary internal drivers) together, shaping a referee's stated likelihood to stay engaged. Underpinned by OST, which captures fairness, supervisor support and job conditions (Eisenberger & Huntington, 1986; Kurtessis et al., 2017; Rhoades & Eisenberger, 2002), it was argued that POS would accentuate a referee's motivation and subsequent ITC. The results from this study are in line with OST to the extent that perceptions of care, concern, support, and other elements of POS were relevant in and of themselves, but also interact with motivation dimensions.

Overall, some support was found for the relationships involving POS explored in this study. For some of the sport-related motivation relationships with ITC, POS was a significant moderator, indicating that a referee's perception of organisational support plays a role. This was not the case for social motivation, suggesting that a referee's social motivation drives ITC separately from any POS influence. For the full set of ARs, the most noteworthy POS interaction effect on ITC was with sport-related motivation. This finding suggests that sport-related motivation such as a desire to give back is important (Baldwin & Vallance, 2016a; Ridinger, 2015) but that the driver does not exist in a vacuum. Rather, a referee's perception of the supportiveness of the organisation to which they are connected facilitates a pathway for sport-related motivation to be realised. So, for example, while a referee may be driven by staying connected to a sport they have been involved with for a lifetime, they feel as though they need a supportive organisation in order to make it happen. No significant POS interactions with motivation dimensions were found for the ECR subgroup, in spite of the likelihood that POS declines over the tenure of an official (Livingston & Forbes, 2016).

Results for the three components of OC were as expected. Mean scores for the affective dimension was relatively higher than the continuance and normative commitment. This suggests that the referees in this study have an emotional attachment to, identification with, and involvement in their RRA (Meyer & Smith, 2000). The subgroups reported similar mean scores.

Exploring the relationships of each of the components of OC individually, continuance commitment had a negative relationship with ITC for ARs. Continuance commitment relates to the *need* to remain with an organisation due to the costs associated with leaving the organisation. These losses could include salary, prestige or connections within the industry (Cuskelly et al., 1999; Engelberg-Moston et al., 2009; Meyer & Allen, 1991). The results of this study are contrary to much of the OC literature, which found continuance commitment was weakly correlated with continuation (C. E. Gray & Wilson, 2008). However, it is reported that if high levels of affective or normative commitment and low levels of continuance commitment are reported, continuance commitment can negatively influence ITC (Meyer et al., 2002). This suggests that the behaviour is not out of the ordinary. It can be interpreted that rugby referees are less concerned about leaving an organisation as they are generally not dependent on tangible rewards (Engelberg-Moston et al., 2009). Furthermore, it could be argued that the lack of alternative organisations for rugby referees explains this relationship (Cunningham & Sagas, 2004).

For ARs, affective commitment had a relationship with ITC in this study, similar to findings elsewhere (Barnhill et al., 2018; Weng & McElroy, 2012). It could be reasoned that the positive relationship between affective commitment and ITC is influenced by referees being appointed to fixtures that they find satisfying and neither mundane nor too difficult (Furst, 1991; Parsons & Bairner, 2015; Ridinger, 2015). This result is positive for referees and their administrators as it highlights that referees in New Zealand are committed to their role because they want to continue rather than feeling they ought to or need to. Furthermore, it highlights that the appointments given to them are mostly appropriate, thereby driving their willingness to carry on.

Unlike POS (two interactions) and OC (no interactions), RC moderated several relationships for ARs. Interestingly, affective commitment moderated the relationship between all four motivation dimensions and ITC. These findings further reinforce that motivation alone doesn't determine ITC (Hoye et al., 2008) and that external factors need to be considered. Furthermore, it highlights that an individual's affective commitment towards their role can amplify the relationship between motivation and ITC. The results suggest that RRAs provide satisfying experiences to their members which empowers them to continue refereeing (Meyer et al., 1993). Furthermore, satisfaction has been found to influence continued participation of officials elsewhere (Choi & Chiu, 2017). While motivations may influence participation, ultimately, this finding suggests that referees wanting to continue (i.e. affectively committed to their role) amplifies their behaviour and drives their participation (Barnhill et al., 2018; Weng & McElroy, 2012). Therefore, these findings indicate that RRAs should provide opportunities to referees that are meaningful and challenging, thereby ensuring they will continue.

5.11.3 Other Organisational Factors

Results from this study provide further evidence that the officiating experience is complex. Indeed, previous studies have found multiple organisational factors affect the referee experience (Ridinger, Kim, et al., 2017). These include administrator considerations (Cuskelly & Hoye, 2004, 2013; S. L. Forbes & Livingston, 2013; Parsons & Bairner, 2015; Warner et al., 2013), continued education (Ridinger, Kim, et al., 2017), access to coaching (Baldwin & Vallance, 2015, 2016a; Livingston & Forbes, 2017), rewards (Forbes & Livingston, 2013; Kim, 2017; Titlebaum et al., 2009) and recognition (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017). Notably, not all of these elements were found to not have a relationship with ITC in the

unique context of this study. For example, elements such as rewards may not have been given much weight in the current sample as they are largely volunteers.

Statistically significant differences existed between ECRs and SRs for administrator considerations with SRs reporting lower mean scores. This indicates a difference of opinion regarding the fairness and considerations shown by rugby referee administrators (Ridinger, Kim, et al., 2017). Individual item results suggest that much of the difference is rooted in the appointments of referees to matches being unfair and based on favouritism, as SRs generally agreed less with related statements. The results here indicate that match appointments are sometimes perceived to be political, reflect favouritism or are unfair (Cuskelly & Hoye, 2004; Doan & Smith, 2018; S. L. Forbes & Livingston, 2013; Livingston & Forbes, 2017; Parsons & Bairner, 2015; Ridinger, Kim, et al., 2017; Titlebaum et al., 2009; Warner et al., 2013). Considering the differences between the groups, it may be that ECRs have not been exposed to the favouritism and politics that their more experienced colleagues have. As referees continue through their careers their perceptions towards administrator considerations may become less favourable. Ultimately, RRAs would benefit from eliminating these perceptions as it can influence continuation (Cuskelly & Hoye, 2004, 2013; S. L. Forbes & Livingston, 2013; Parsons & Bairner, 2015; Warner et al., 2013).

Univariate and multivariable BLRs were conducted to understand the influence of other organisational factors on the continuation of referees. In several studies, it has been indicated that these other organisational factors have a relationship with an officials ITC (Baldwin & Vallance, 2016a; Bernal et al., 2012; Cuskelly & Hoye, 2013; Furst, 1991; Kellett & Warner, 2011; Ridinger, 2015) and intention to quit (Auger et al., 2010; S. L. Forbes & Livingston, 2013; Hancock et al., 2015; S. Kim, 2017; Livingston & Forbes, 2016; Titlebaum et al., 2009; Warner et al., 2013). Of interest in the current study, only continuing education, access to coaching and recognition individually had a relationship with ITC. Yet, administrator considerations and rewards did not for ARs or the two tenure-based subgroups. These results suggest that referees seek support and appropriate opportunities from their RRAs along with being recognised for their services to the game.

Providing quality educational experiences to referees is vitally important not only to the development of referees but also prepares them to deal with the varying situations they may be exposed to (Ridinger, Kim, et al., 2017). Continuing education ensures that referees provide a quality service to their stakeholders as well. It has also been reported that education of officials is lacking, and there is room for improvement (Webb et al.,

2018). The continuing education-ITC relationship in this study was positive, which is consistent with other studies (Cuskelly & Hoyer, 2004; Ridinger, Kim, et al., 2017). This demonstrates that a well-rounded and engaging education programme is likely to facilitate the continuation of referees. However, these education programmes must not only focus on the theoretical elements of refereeing but also include other elements of refereeing, such as conflict management and relevant practical work (Balch & Scott, 2007; Baldwin, 2013a; Cleland et al., 2017; Cuskelly & Hoyer, 2004; Dell et al., 2016; Walters et al., 2016; Warner et al., 2013; Webb et al., 2018). It is through providing holistic education programmes that RRAs will likely have referees continue. While education is an important aspect of the development support provided to referees, it is not the only thing.

In this study, it was found that access to coaching also had a positive relationship with ITC. While the referee coaching mean scores for ARs and the two subgroups were middling, the results suggest that frequent and meaningful referee coaching influences continuation. Referees conveyed that there is a lack of coaching (Livingston & Forbes, 2017) and observation opportunities (Baldwin & Vallance, 2015, 2016a) provided to referees. The results of this study reinforce findings elsewhere, indicating that referees seek more feedback for development and performance (Warner et al., 2013; Webb et al., 2018). With this insight in mind, it would be worthwhile for RRAs to invest in referee coaching as this will support the retention of their referees. However, these results must also be interpreted somewhat cautiously, as it is the first time that referee coaching has been explored in this way. While the support provided to referees could be better, recognising the efforts and success of referees is also an important factor.

In this sample of referees, there is a positive relationship between recognition and ITC. This aligns with a myriad of other research (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017). Although the mean scores for the composite variable was relatively high, indicating that rugby referees in New Zealand feel recognised, a lack of recognition in officiating organisations is actually the norm (Cuskelly & Hoyer, 2004; Livingston & Forbes, 2017; Rainey & Hardy, 1999; Titlebaum et al., 2009). Therefore, RRAs should continue to recognise their referees through rewards (Livingston & Forbes, 2017) or appreciation (Baldwin & Vallance, 2016a; Spor & Dergisi, 2017), as the more recognition referees receive, the more likely they are to continue.

Multivariable BLR analyses were conducted to explore which organisational factors were related to ITC. The results differed for ARs as compared to the subgroups –

ECRs and SRs. For ARs, continued education and access to coaching had positive relationships with ITC. This result indicates that not only one factor explains continuation of rugby referees and reinforces that retention of officials is complex (Auger et al., 2010). No single organisational influence could explain the relationship with ITC for ECRs. These results suggest that referees require a holistic approach from their RRAs to ensure a positive experience

5.11.4 Abuse, Sense of Community, and ITC

It has been reported that the presence of SoC can help officials navigate and deal with abuse (Kellett & Shilbury, 2007). Thus, the moderating effect of SoC was analysed amidst the oft-focused upon abuse-ITC relationship within this study.

Initially, it was found that abuse was not related to ITC, which is inconsistent with the literature (Auger et al., 2010; Baldwin & Vallance, 2016b; Cuskelly & Hoyer, 2004; Dell et al., 2016; Dosseville et al., 2013; A. Forbes et al., 2015; S. L. Forbes & Livingston, 2013; Hancock et al., 2015; Livingston et al., 2017; Livingston & Forbes, 2016; Titlebaum et al., 2009). This is an interesting finding as media reports highlight referee abuse in rugby and its supposed effect on referee numbers (e.g. Conchie, 2022; Porter, 2022). Whilst reports suggest abuse is prevalent it could be argued that rugby referees are used to this abuse and are conditioned to ignore it. This has been reported in a study of amateur Australian Rules umpires who describe it as “water off a duck’s back” (Kellett & Shilbury, 2007). While there are only two studies with such findings, it could be possible that officials in the Australasian region are more likely to ignore abuse than let it affect their continuation.

As anticipated, SoC was found to be positively related to ITC, consistent with previous research (Bernal et al., 2012; Cuskelly & Hoyer, 2004; Kellett & Shilbury, 2007; Kellett & Warner, 2011; Warner et al., 2013). The relatively high mean score for the SoC composite variable may indicate that referees feel part of something bigger than just their RRA. The result is also positive as it demonstrates that cliques may not exist as this has been found to be detrimental to the formation of an SoC for officials (Kellett & Warner, 2011; Warner et al., 2013). The lack of cliques may also be indicated by ECRs reporting similar mean scores for SoC as SRs. This study's results differ from others, suggesting that novice officials have not had the opportunity to experience a SoC (Ridinger, 2015). The presence of a SoC could be due to the social support systems forged by referees (Cuskelly & Hoyer, 2004, 2013; Wolfson & Neave, 2007), which help them to develop confidence (Livingston & Forbes, 2017). These relationships and support systems allow

referees to navigate their experiences as a collective rather than individually. Ultimately, the results are positive for referees and RRAs as the more SoC a referee experiences, the more likely they are to continue.

Limited research has indicated that SoC can influence how officials manage and deal with abuse (Kellett & Shilbury, 2007). The findings of this study indicate that SoC has an influence on the abuse-ITC relationship for ARs and ECRs. While abuse was not found to have a significant relationship with ITC, this result suggests if abuse was to influence the continuation of referees, the presence of a SoC would negate that effect. This finding gives further weight to the idea that RRAs should focus on building a cohesive, connected community of referees who do not feel on the outer (Kellett & Shilbury, 2007) or isolated (Dosseville et al., 2013). Whilst this is the first study to explore the influence of SoC on the abuse-ITC relationship in this way, it provides the foundation for further exploration to understand this phenomenon.

In contrast, SoC was not found to influence the abuse-ITC relationship for SRs. This is perhaps unsurprising, as it is likely that SRs have been exposed to a lot of abuse over their prolonged careers and have learned to deal with it in various other ways (Kellett & Shilbury, 2007). While this is not ideal, it highlights the wider societal issues around sport and abuse of officials, whereby its prevalence is concerning (Dawson et al., 2021; Jacobs et al., 2020; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019; Webb, Rayner, et al., 2019).

In summary, this study had four main foci. These foci explored motivation dimensions which influence onset and continued participation, the influence of POS, OC, and RC on the motivation-ITC relationships, the relationship between other organisational factors and ITC, and the influencing role of SoC on the abuse-ITC relationship. A BLR was used to analyse various relationships related to these foci. The results indicated that no single motivation dimension explains initial participation, yet intrinsic motivation explained continued participation for ECRs. However, intrinsic motivation explains the onset motivation for ARs. Some interaction effects were observed as part of focus two. POS influenced the SRM-ITC relationship for ARs and SRs. Whereas, the affective component of role commitment moderated several motivation-ITC relationships for ARs. However, OC did not moderate any relationship. Other organisational factors such as continued education, access to coaching and recognition featured prominently. While no single organisation factor explained the relationship with ITC for ECRs, access to coaching and continued education explained continuation for ARs. Finally, it was found that SoC moderated the abuse-ITC relationship for ARs and

ECRs. Overall, the results support the findings of Study 1, whereby RRAs play a central role in the experiences of referees. The following chapter builds on this knowledge through interviews with ECRs for further insight.

Chapter 6 - Interview Findings and Discussion

Chapter 6 of this thesis is a presentation of the findings from interviews conducted with 19 Early Career Referees (ECRs) across New Zealand. Interviews were used to build on from the knowledge garnered from referees in Study 2. Specifically, the purpose of the interviews was to explore Research Question 5: *How do early-career rugby referees perceive organisational influence contributes towards a quality experience?* These findings are discussed in terms of relevant literature. Table 36 outlines the pseudonyms, Provincial Union (PU) and the years refereed for each interviewee.

Table 36 - Interviewee Demographics
Interviewee Demographics

Pseudonym	Provincial Union	Age	Years Refereed
Andrew	Hawkes Bay	35	5
Chris	Poverty Bay	48	4
Colin	Auckland	42	3
Dennis	Otago	60	5
Doug	Canterbury	48	3
Greg	North Harbour	49	3
Harry	Auckland	32	3
Ian	Bay of Plenty	45	3
Jensen	North Harbour	33	3
Lewis	Bay of Plenty	24	2
Michael	Wellington	51	2
Nathan	Wellington	29	4
Neil	Canterbury	47	3
Oliver	Tasman	19	4
Peter	Wellington	46	2
Quentin	North Harbour	29	5
Steven	Wellington	50	3
Xavier	Wellington	14	2

A thematic analysis of the interview data highlighted several factors that characterise the ECR experience. These were broadly categorised as individual and organisational. Individual factors relate to the individuals themselves, whereas organisational factors relate to the offerings, actions, processes, and support provided by Rugby Referee Associations (RRAs). The latter category is the focus of this chapter. Four themes reflecting organisational aspects of the ECR experience are referred to as Remuneration Ambivalence, Broader Recognition, Disparate Support Systems and Perceptions of Inequity. These themes broadly capture meaningful aspects of the

experience that relate to the organisations that referees are connected to. Each of the four themes also have distinct facets (**Error! Reference source not found.**). Within each section, a selection of implications related to these findings are presented, although further coverage of what RRAs can do in light of all of these insights is also provided later in the thesis.

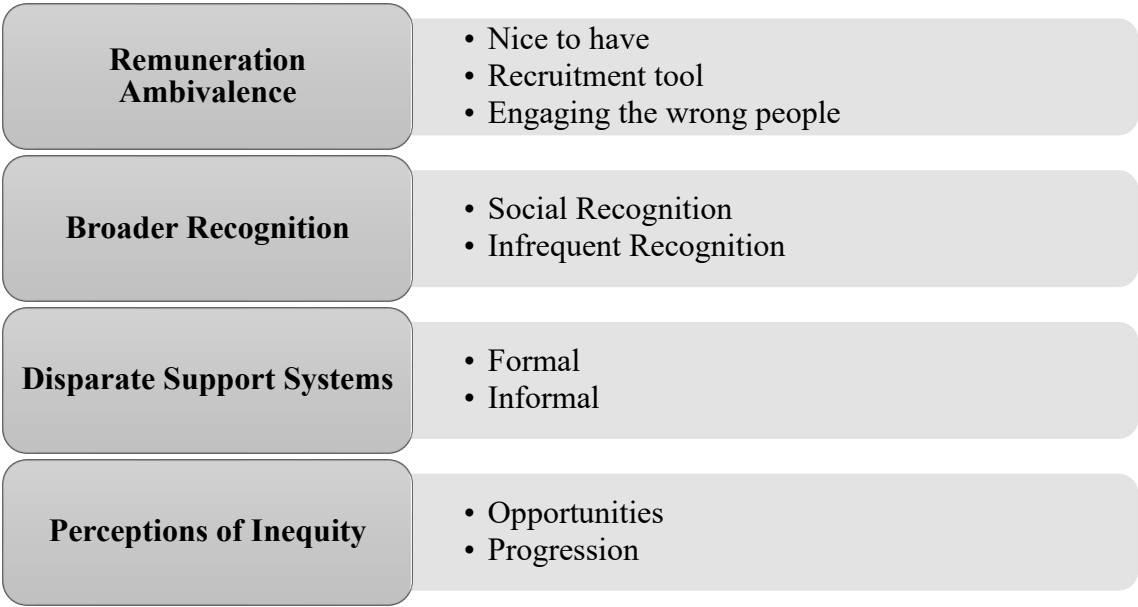


Figure 4 - ECR Experience Themes & Underlying Facets
ECR Experience Themes & Underlying Facets

6.1 Remuneration Ambivalence

Financial rewards and remuneration are a central part of the experience for many officials and have been found to positively influence continuation (Baxter et al., 2021; S. L. Forbes & Livingston, 2013; S. Kim, 2017; Titlebaum et al., 2009). While some sporting codes in New Zealand remunerate officials, including some RRAs, rugby referees are primarily a volunteer workforce. Collectively, those interviewed expressed mixed feelings, and some perspectives were contradictory regarding remuneration. Hence this wider group of sentiments was referred to as remuneration ambivalence. Some ECRs indicated that remuneration would be nice. Others identified that it could be a great recruitment tool, while a sense of concern that it would attract the wrong individuals to the role was also evident. These three important facets of the overarching remuneration ambivalence theme are outlined next.

6.1.1 Nice to Have

Remuneration was not communicated as a primary driver for ECRs, and this is in contrast to what has been reported in most studies of officials (Bernal et al., 2012;

Diotaiuti et al., 2017; Johansen, 2015; Kellett & Warner, 2011; Livingston & Forbes, 2016; Parsons & Bairner, 2015). While ECRs indicated that remuneration would not be a driver of their participation as such, they did convey that it would be welcomed and a “nice to have”, a sentiment reported in related research (Kellett & Warner, 2011; Schaeperkoetter, 2017). One interviewee named Oliver articulated that remuneration would be a welcome addition because “the ones that are doing it at the moment are doing it for the love of the game. So, it would just be a nice little extra reward. Probably on top of that.” Greg recounted an instance when his RRA was able to provide remuneration and that it was warmly received:

It was my first year as a full ref. We got paid petrol money first time ever, and obviously didn't happen last year because [the] union wouldn't have had any money and may happen in the future depending on if they do this massive deal. It was a nice acknowledgement... it was very nice. I took my \$160, I think it was, and went and bought rugby boots because my rugby boots were pretty shot, and I [had] bought forwards boots, instead of buying backs boots. [I] upgraded to a proper set of backs boots, and now I can run much better. And I've got a set of heel lifts and those sorts of things. For me, those nice little gratuities. I certainly appreciated [it] but not expected.

While remuneration did not seem to influence Greg’s continuation directly, it contributed positively to his overall experience. Also, referees investing in their officiating kit using money they receive could improve the experience for players, which is a benefit that RRAs should be mindful of.

Although not typical, some of NZ’s RRAs provide travel reimbursements. Neil, a referee in a rural part of NZ, outlined his feelings on this:

We get a small reimbursement for petrol costs at the end of the season, depending on what funding come[s] through [from] the union. So that's quite nice... But being rural here, you know, we do have to do quite a few (kilometres) in a season. So being remunerated for that, to cover everything, would be really nice in terms of covering your time. (Neil)

Neil’s experience aligns with related research indicating that the costs associated with officiating are increasing and are a financial burden (Livingston & Forbes, 2017).

Considering the increasing cost of living in New Zealand (Stats NZ, 2022), remuneration and/or more widespread reimbursements could keep rugby referees engaged.

While remuneration can lessen the financial burden of refereeing, it may also mitigate the negative feelings associated with abuse which is worsening around the world (Dawson et al., 2021; Jacobs et al., 2020; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019; Webb, Rayner, et al., 2019). Indeed, ECRs in the current study indicated that remuneration might somehow dampen the impact of abusive experiences. Harry explained that it "would soften the blow when you do have a tough experience, or you go out, and you have a tough game. To know that you're being supported financially, it would be good." Financial support having this effect has not been reported in the body of officiating research to this point. It may be that this sentiment is unique to this sample of volunteer officials. Therefore, it warrants further exploration in other contexts, including amongst a population of officials who are well compensated. Remuneration as a bonus was not the only positive sentiment expressed by the ECRs. They also indicated that it could be a great recruitment tool.

6.1.2 Recruitment Tool

When given the opportunity as part of the interviews in this study, several ECRs noted that many other sports pay officials, and this was viewed favourably as a means of recruiting and retaining referees. On this issue, Oliver said, "I think [referees in] most other sports get paid. I mean, you can list off basketball, volleyball, cricket, pretty much every other sport. The referees get paid." Andrew was one of several interviewees who highlighted the particular value of remuneration for young people.

I know that a lot of other kids choose other sports to umpire [or] referee because they do get a little bit of coin, and to some of these kids that are refereeing or umpiring, they get 8-10 bucks a game, but they save it till the end of the season and they get 300-400 bucks at the end of the season, so they're happy (Andrew).

Xavier, who also referees touch rugby, described the experiences of his peers. He says, "one of the main reason[s] people join that is because they get paid for games they do." Although being interviewed about his own experience, Michael diverged at one point, recounting his son's experience refereeing Futsal, and it was quite insightful. "I'm pretty sure he enjoys it, and because he plays as well. But for him, that payment is probably [a] more significant incentive." These perspectives suggest that remuneration

can influence the initial recruitment and ongoing retention of referees. Alongside these thoughts about referee remuneration in other sports, some ECRs indicated that rugby should follow suit - specifically to draw in new referees and keep experienced referees engaged.

Many ECRs believed remuneration would be a great way to entice people into refereeing rugby (Cuskelly & Hoyer, 2004; Kellett & Warner, 2011; Livingston et al., 2017; Livingston & Forbes, 2016; Ridinger, 2015; Warner et al., 2013). Oliver mentioned that “it would get a lot of people into reffing.” Quentin further stressed this by noting that “we severely lack match officials, and I don’t know if it’s the money thing is a big thing, but I reckon it’d be a massive incentive for a lot of people.” Remuneration as a means to recruit new referees should be considered by RRAs as it may alleviate the current shortages. Furthermore, it is evident from the insights provided by the ECRs in the current study that remuneration could make refereeing more attractive to young people.

ECRs indicated that remuneration would be best targeted at the younger generation rather than all referees. Ian mentioned that “for some of those younger groups, and I would say in [the] 20 to maybe 25 bracket... it's probably something that they're interested in. Those of us that are probably 35 to 55. Not so much". Another participant said,

I think it's more the younger age group to attract them into refereeing then, yes. I think that is something that will certainly help try and attract younger referees into it if they were getting some sort of compensation to some degree, which is probably more a generational thing than anything else. (Peter)

A generational dimension of remuneration perceptions was evident when an ECR mentioned his son was contemplating refereeing the following year. He said,

My young fella, who plays, wants to start looking at doing a bit of refereeing once he starts college, which is in another year because the [PU] do pay \$20 if you wish to take it per game. So, for him, it was ooh. I could do something I enjoy and get paid. (Ian)

These stories from ECRs suggest that NZR and RRAs could explore remuneration as a recruitment tool to engage younger people. As noted, this has been found to influence the continuation of officials under 30 in other contexts (Ridinger, 2015). Furthermore, it

is known that students think of their officiating as employment to fund their studies or lifestyle (Ridinger, 2015). Remuneration could potentially make refereeing more attractive to students compared to other part-time work they may engage in. Another reported benefit of remuneration for young referees is lengthening connection with their sport (Fowler et al., 2019; Ridinger, Tingle, et al., 2017). These insights suggest that the benefits of remunerating younger referees may be two-fold. The young people will benefit from the funds enabling them to stay connected, but more referees will benefit the wider community.

Interviewees also expressed that those RRAs offering remuneration generally do not effectively communicate the incentive ahead of time. Instead, referees were often surprised by it afterwards. Lewis explained that he only found out about remuneration after he joined. He said, “the [RRA] let us know. I didn't know about it before I signed up here. But I didn't go looking for it either. They told us about it. And you could choose to opt-in or opt-out for it.” Furthermore, an ECR expressed his lack of understanding regarding the remuneration process in his RRA.

The [referees association] give you a travel allowance. At the end of the season, they note up the amount of official appointments that you have, and you're allowed to apply for the allowance. Which you can probably research that a bit more because I don't fully understand how that works.
(Michael)

Based on the stories told here, RRAs could more purposefully inform potential referees of the remuneration on offer. Further research is required to understand if promotion of referee remuneration influences participation. Although there is evidence to suggest remuneration may benefit the wider community in a variety of ways, some referees expressed some reservations about it.

6.1.3 Engaging the Wrong People

The potential for payment to attract referees for the “wrong reasons” surfaced prominently within the myriad of perspectives on remuneration that were articulated. Some interviewees suggested that if referees were remunerated, it might encourage the wrong type of people to take on the role. For example, Quentin expressed concern:

You'd also attract the wrong type of person in a lot of ways as well if you opened up that type of thing (remuneration). Like you'd get those people

that would just do a game just to get an easy 20 bucks if I do one game, so I'll do three games and get 60 [bucks]. (Quentin)

This fear was echoed by Ian, who also raised a related concern about quality:

I worry that then you might get people that aren't in it to actually give back to the game. They're in it for a paycheque, and then I worry that what quality of ref will you get, and do they care about what they're doing on the day?... I think it'd be a slippery slope if the Union, the New Zealand Rugby Union, started trying to get refs who weren't in it to enjoy the game. They were in it because [they] think they can get paid. And I think then you'd see the standard of reffing would go down... I just say you've got to have some motivation to do it off the bat, not money (Ian).

Collectively, rugby referees seem to be worried that the introduction of remuneration may encourage those not invested in the sport to take up the role. These fears may be linked to a longstanding culture whereby voluntary referees have traditionally been in it to give back to the game. This sentiment has not been previously explored in the body of refereeing research. It is possible that it has come into the discussion more recently in an environment where the pros and cons of remuneration are actively being debated.

These various ECR sentiments highlight that there are mixed and contradictory feelings regarding remuneration, supporting its characterisation as collective ambivalence. Many ECRs believe referees should be remunerated for their time, while others mentioned that it would not make a difference to their experience, indicating that it would be a great tool to recruit new referees, especially young people. Furthermore, a few expressed that they were worried about the type of people who may engage with refereeing if they were to get paid. These results indicate that the remuneration of rugby referees is complex and requires NZR and RRA administrators to continue monitoring the attitudes of the refereeing community to inform future actions. In a related sentiment, ECRs in the current study indicated that more needs to be done regarding the recognition of all referees, which is outlined next.

6.2 Broader Recognition

ECRs interviewed in this study highlighted the importance of broader recognition for the wider referee community. This second set of sentiments reflected the generally

feeling amongst referees that they are not recognised enough. RRAs often recognise high-performing members. However, the importance of recognising all referees has been highlighted in related research (Livingston & Forbes, 2017). Thus, a lack of recognition can lead to referee discontinuation (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017). Sentiments expressed by the interviewees around recognition related to how equitable it is across the community and the frequency.

6.2.1 Equal Recognition

Several ECRs discussed RRA awards ceremonies where top-performing referees are recognised. Jensen explained that "we have a prizegiving every year, there's a long list of trophies and prizes that they give out." This recognition of referees at prizegivings is consistent with practices elsewhere (Livingston & Forbes, 2017). Furthermore, it was also reported that RRAs recognised promotions and key appointments in front of peers at their weekly (or fortnightly) meetings. Michael described that "they celebrate promotions, it's acknowledged by the group. So, there's a little bit of prestige there as you move through." This sentiment was shared by Jensen, who said his RRA is "good at announcing when people go up panels." Another referee provided further reflections on the quality of recognition in the referee community:

Usually done on our Monday night meetings as part of general business at the start, at the meetings, from the committee that if they have approved [the] promotion of a particular referee, they'll read out that person's name in front of everybody and make that known. (Peter)

Results elsewhere indicate that recognising referees amongst their peers gives them satisfaction (Kellett & Warner, 2011). Several interviewees also recounted how referees are given exclusive appointments.

We have a bit of an announcement ceremony when it comes to finals time for the referees that have been picked to do quarterfinals, semi-finals, [and] finals... and everyone's really good, really supportive. So that's really nice to be recognised in that way. (Neil)

Michael further explained that his RRA does "put some special recognition if you get finals appointments all the way from the college, through to club rugby. So, there's a bit of prestige about getting the Under 15 college finals appointment." While this

recognition is welcomed, it inadvertently excludes some referees as they may not receive this recognition throughout their careers. Michael explains how social media can be used to recognise those who may rarely or ever be awarded appointments to referee premier rugby,

I think the [other RRA], they do Facebook and social media, publish the premier appointments, which is a good thing. There's an element of prestige there. I think they (RRA) could extend that to probably the 1st XV. I know the [other RRA] does it for 1st XV appointments. I think that's something that [RRA] could take. I think if you have a 1st XV appointment, some people will never, especially my age group, might never ever get to that Level 1. You know, starting this late. But you might get to a 1st XV appointment, which I think might be Level 3 in our region.

Using social media to celebrate and recognise appointments is likely to work well. However, some referees may never be appointed to such matches throughout their refereeing careers, meaning they may never experience such recognition. This would suggest that other methods may need to be explored. Numerous examples shared by the interviewees indicate that high-performing referees were often recognised. This included having the number of games refereed being recorded.

Another form of recognition is the celebration of milestone matches. Neil mentioned that in his RRA, "if anybody reaches milestones like 50 games, 100 games, it's definitely recognised in terms of our actual refereeing group." This was similar at Lewis' RRA, where they "would recognise referees that were doing their first premier match ever, their 10th Premier match, then the normal milestones 50 and 100 [games]." However, when Neil was prompted whether it was only for Premier or Division 1 referees, he said, "just for the Div 1 guys in my experience. I haven't seen it for anybody else in the time that I've been in it." He also indicated that this recognition should be extended to all referees:

Yeah, that definitely would be. If you got to a 50-game milestone, for example, no matter what it was to actually say, hey, look, this guy's refereed, 50 games for our union over the last however many years, that would be cool.

This sentiment suggests there is a desire for referees to be recognised in a similar fashion to their high-performing peers. Oliver explains how his RRA monitors and recognises milestone matches for all referees across all grades.

We've got one guy by the name of [association member] who keeps track of all the appointments. So that's right down from reffing an Under 11 game up to the Div 1 stuff... He's got [a] list dating back to [when] some of the older referees first started refereeing. He's very good.

Neil and Oliver's sentiments highlight that RRAs could keep a tally of and ultimately recognise the number of overall matches for everyone, not just for premier referees. With many RRAs using appointment management software such as Who'sTheRef or AppointMe, tracking matches for each referee is much easier than it used to be. With this information, RRAs could recognise milestone matches by inviting referees for a short speech at training and development evenings or via social media. Recognising officials in this way means that referee administrators would need to shift focus away from solely appointing and administrating officials and include holistic elements such as recognition into their practices (Livingston et al., 2017). Recognising referees has many positive outcomes, including building the morale of referees and making them feel appreciated (Baldwin & Vallance, 2016a).

6.2.2 Infrequent Recognition

While much of the recognition of referees is based on performance (i.e., finals appointments and premier match milestones), NZR and RRAs also recognise referees for years of service. Referees are recognised after 10, 15, 20, 30, 35, 40, 45, 50 and 55 years of service. This recognition is generally in the form of a certificate at ten years and a badge for each milestone from there onwards. These awards are acknowledged in annual reports and presented at AGMs (Auckland Rugby Referees Association, 2017). However, as is evident from the ECRs interviewed in this study, waiting ten years to formally recognise referees may not be good enough.

In some RRAs, referees are not given their jerseys initially. They are required to pass a field test first. Greg explains, "[in the] first year when you're brand new, you're trying to earn your jersey." Jensen further elaborated how earning your jersey is special, and "even just being presented with your shirt was a massive achievement for some people." While others did not explicitly mention this experience, some RRAs use this mechanism to recognise their new referees and highlight the successful navigation of their

first game. Several referees from another RRA explained how they received a physical memento instead of a jersey presentation. Peter describes his experience,

As a first-year referee, they make a point that, once you've done three games, then you're presented with a little badge. Which [they] bring you up, give you a certificate and give you a badge. So that's part of their traditions and celebrations, which is cool. That was pretty cool to go up and get that.

Xavier also provided insight on the presentation:

I do know that they have this thing for new referees when you've done three games. You get like little badge and award, and you come up in front of the association [and are told] 'good job doing three games you're like an official referee' kind of thing.

Providing new referees with a memento can foster a sense of being valued. While the interviewees welcomed the memento, the infrequency of formal recognition was unsettling. Steven mentions.

*If you've done 150 college games, which would be roughly about three years. You should get a bloody pat on the back and a badge for putting [up] with all those little sh*ts because they think they know all the rules. But you don't. You get the thank you for turning up, but there is no physical memento that you have achieved x amount of games at a certain level,*

The sentiments shared by ECRs indicate that modest expressions of appreciation are not enough to recognise referees, which is consistent with related research (Baldwin & Vallance, 2016a; Spor & Dergisi, 2017). This highlights that recognition in the form of awards or presentations is meaningful to ECRs (Livingston & Forbes, 2017), suggesting that RRAs should explore creating additional milestones to complement the current system and meaningfully recognise them.

The various sentiments about equity and frequency of recognition should spark discussions about possible initiatives for RRAs. Furthermore, due to the voluntary nature of the role, referees appreciate being recognised by their RRAs. The findings suggest that RRAs should explore implementing systems to recognise all referees rather than focusing

on high-performing referees. While recognition of ECRs affects their continued participation, it was identified that support systems are also important.

6.3 Disparate Support Systems

The importance of support for officials is well established. However, based on the perspectives of ECRs, it is evident that although it is very effective in some ways, the support offered to ECRs is disparate. Therefore, the third theme reflecting ECR sentiments includes specific content about how support systems vary dramatically. In many instances, ECRs reported positive attitudes towards the informal and formal support systems provided. However, it was evident in some cases that these support systems diminished over time and were not delivered consistently.

Some of New Zealand's RRAs provide formal support like first-year programmes, whereas others provide informal support such as mentoring programmes. The first-year programme is a formal education programme that supports new referees to become more confident and competent in refereeing rugby. This programme is generally offered in RRAs, which have enough new referees each year to make such a programme worthwhile. Otherwise, referees join the wider RRA as part of their development programmes. It was evident from this set of referee interviews that, like more formal support programmes intended to foster a supportive environment, informal support systems are also not streamlined around the country.

6.3.1 Formal

The purpose of the structured first-year programme is to develop the confidence and competence of new rugby referees but also to provide them a support network to navigate through their initial season. First-year referees meet weekly, learn about the technical and tactical aspects of refereeing, and develop a peer-support group. Lewis described how the first-year programme was run in his RRA.

You break off into a new [referee] group and [first-year coordinator], had pretty much set an arrangement for the entire season. This week, we're going to be talking about lineouts. Next week, we're going to be talking about rucks. For [the] next six weeks, we're going to talk about scrums because they're so bloody technical. So, I felt like he was really well prepared, whether that was his own preparation or whether that was something that the rugby union had given him. I don't know.

Support of ECRs early in their career is consistent with other contexts whereby new referees perceive more support when beginning (Livingston & Forbes, 2016). It is positive to see such programmes delivered as training of officials has been reported as inadequate elsewhere (Cleland et al., 2017; Dell et al., 2016; Warner et al., 2013; Webb et al., 2018). This dedicated support of first-year referees means they are not only well versed in the laws of rugby; they also do not feel like an outsider as they are with others at a similar point in their careers. While the structure of the first-year programme seems to support the development of new referees, it also added value to their experience in other ways.

The close, intimate nature of the first-year programme was highlighted by several of the interviewees. ECRs have indicated that the support received from their coordinators and peers explains their continuation for a second season. Nathan explained,

When I think back to my first referee group, quite a small group of new referees, that level coach I had then got to know us all really well and was really invested in each of us. I felt like super supported that year when I needed [it] the most because I was brand new. That would have been make or break for me if I turned up and had no help. I would've been like, well, that wasn't really for me, and I wouldn't have turned up again. So, he's a big part of why I am still reffing.

A similar sentiment was shared by Michael, who said,

It (first-year programme) was supportive. I felt there was a programme, [and] it's not like "Oh, you want to ref", here's a whistle, here's a uniform, go for it [and] we'll tell you when [you make] mistakes. [It] wasn't that sort of experience where they just chucked you in. It was like, okay, no, we want you to be safely managed through to a point where you're always progressing. So yeah, I suppose that's the reason why I've come back.

These sentiments indicate that the first-year programme acts as an incubator that nurtures referees to deal with the rigours of refereeing rugby. Having a formal first-year group also meant that it was a forum in which first-year referees could share their experiences from game day.

That was [a]real cool thing because people would go, oh, this happened during the game, and I think I got it right, or how could I have better managed that situation to either prevent it happening or minimise the impact of when it happened or manage the situation, especially in those sort of foul play incidents. And of course, once you've got the very experienced coaches, which [is] sometimes why the meeting went from hour to two hours. They would just go into storytelling about oh, that reminds me of this time 20 years ago, but those are great. Those are great. I think that's probably the most valuable because, yeah, the laws law. But that whole thing about how to do game management, and managing those scenarios, when they do happen is like is probably where the greater value comes [from]... it was good enough numbers to have shared experiences and you know, mutual encouragement. So that was an enjoyable, so like, you didn't feel like you're the only one making the mistakes (Michael).

The first-year programme is a platform where the foundations of a sense of community can be built by providing a space for those with commonalities and building camaraderie (Kerwin et al., 2015; Warner & Dixon, 2011). The sharing of stories helped first-year referees to build commonality with each other. Through this shared experience, they can support each other in navigating negative experiences (Kellett & Shilbury, 2007) and developing their skills as referees, building confidence and self-esteem (Livingston & Forbes, 2017). This development of camaraderie means that officials are more likely to continue refereeing (Baldwin & Vallance, 2016a; Bernal et al., 2012; Ridinger, 2015). While the support provided by first-years to each other may be informal, it is due to the formal nature of the programme that this connection is developed. Highlighting that a first-year programme has not only law benefits but also provides peer-support benefits. However, when referees graduate from the first-year programme, the support they receive changes.

Despite the positive sentiments about the formal first-year programme, it was evident that this support was not sustained throughout their tenure as ECRs. A significant disconnect seems to happen after the first year, reducing the extent to which ECRs perceive a degree of formality in the support structure. Greg explained his shift from the first-year programme,

The one thing for me was at the end of first year, going into second year it's a big step. First-year, I've had [1st-year trainer], and across the whole

way through every week you go, you talk about your game on the weekend, we go over a piece of the law to get you more technically correct and those sorts of things. And then the next year, you step into the association meetings, and you're the same as everyone else. Yeah, I'm on a different panel, but you're the same as everyone else.

Peter articulated how he was unsure where he and his son Xavier fit in their second year.

[I] didn't really know what would happen coming back this season, how that works. Whether we're still considered first-year refs or not first years, ungraded referees, but turns out by default, you go straight to Level Five as a minimum anyway. So, first time we did go along to our referee meeting this year, we sort of tuned up and [they] said go to your level groups, and I said to Xavier, 'what level group are we?' No one's actually told us officially, like are we actually Level Five? So, we weren't officially at any point told you are Level Five, Level Four, whatever to know what group to go to.

It is evident that RRAs need support structures to help referees graduating from the first-year programme integrate into the wider system. To bridge this gap, it was indicated that first-year coordinators made themselves available to their former first-year group to support. One ECR said,

When we went into the second year [and you] just kind of drift into JRC. They, [1st-year trainer 1] and [1st-year trainer 2], were quite open about the fact that they wanted to keep in touch and not let us just drift. So, it was an open invitation to get in touch where possible. So, for that second season, which turned out to be really short. I just got in touch with him if I needed any assistance. (Harry)

It is imperative that RRAs acknowledge the significant drop-off in support from the first year to subsequent years. While it is acknowledged that perceptions of support decrease over time (Livingston & Forbes, 2016), this sudden lack of support in the second year is worrying and needs immediate recognition and rectification. Furthermore, it is known that if officials do not perceive to be supported, it can lead to discontinuation (Choi & Chiu, 2017; Cuskelly & Hoyer, 2013; Giel & Breuer, 2020; S. Kim, 2017; Livingston

et al., 2017; Livingston & Forbes, 2016). Thus, support systems such as mentoring could be implemented to ensure new referees feel supported within their RRAs.

6.3.2 Informal

In contrast to the formality of the first-year programme, a number of other more organic mechanisms are in place across the rugby refereeing community that provide support. It was evident from the ECRs that these programs are inherently disparate in the way they take shape around the country. For example, mentoring is a great source of support in many cases but does not appear to be streamlined from region to region. Mentoring not only creates a support system (Livingston & Forbes, 2017; Parsons & Bairner, 2015; Ridinger, 2015) but also helps develop a sense of community (Livingston & Forbes, 2017; Nordstrom et al., 2016; Parsons & Bairner, 2015; Ridinger, 2015). Mentoring in RRAs is generally informal, organic, and often sought out by the referee. Jensen explains how he capitalised on an out-of-action colleague who could not referee because of family commitments. He mentioned,

A friend of mine who's a Panel One ref - I'm a Panel Three ref. He just had a baby. He was willing to come down to my game in his own time, [and] critique it with his son. And it was very valuable, the information that I got back from it.

Although this support for Jensen seems to be a one-off, the interaction was of value to him. Another ECR explained how having a mentor added value to his experience:

He's [mentor] been great... he's come along for a couple of them [games], made himself known to me. Most weeks, he'll text me on a Monday or Tuesday asking what my appointment is for the weekend ahead. So at least there's that connection there. I know he is a referee. So, him giving up his time to support me, he doesn't have to do [it]. But he's obviously been asked to do it. And he's great. Yeah, I really enjoy it. (Lewis)

He further explained how the mentor relationship has been beneficial to him.

*You've got someone there you can rely on. Any questions you can ask, anything like that. You've got someone that's going to help you out. If he's there on the weekend and sh*t hits the fan, you know, he's gonna support you if you need that.*

These sentiments shared evidence that a support person or mentor can significantly influence the experiences of ECRs. Ian explained his perceptions of the potential benefits of having a mentor,

I think it would make you become more confident as a ref a lot quicker. So, I think, whereas, in that first year, that's probably six to eight games in before you're starting to actually gain some confidence in what you do. Whereas I think if you have had that person with you, probably two or three game[s] in, you'd be like, oh, I'm on this, I'm good and [know] how to deal with the sideline stuff, interactions with coaches and stuff like that. Having someone there with you that if you got in a situation where you're like ahh, they could go 'well actually' and just back you up.

Mentoring brings value to the refereeing experience as it not only aids the development of referees but also encourages social integration (Baldwin & Vallance, 2016a; Bernal et al., 2012; Ridinger, 2015). Having a mentor could help alleviate the issues faced by second-year referees who felt lost transitioning out of their first-year programme. The formalisation of a mentoring programme has a positive influence. Quentin explained how his RRA had implemented a policy to provide mentors formally.

This year [there] is this policy that's going to come in that every Panel One referee has to mentor a second or third-year referee. Which I think is good because it creates that supportiveness of each other and all that.

Another interviewee also identified that engaging Level One or Premier referees to mentor and support referees could be beneficial.

Level One refs would be the perfect coach for a new ref because they're there. They're at the meetings. They're someone they can catch up with at those fortnightly meetings. Ideally, if that Premier refs reffing at three o'clock, they could go and watch the Level Five ref at 10 am because they're not going to have a clash because they're doing completely different grades (Nathan).

While Level One or Premier referees may have other commitments such as family and work, the ability to provide someone new with support and knowledge would be

invaluable to ECRs. More so because these referees are generally looked up to within their RRAs. While they have the subject-matter expertise, they are also well connected socially in their RRA. Tasking an individual with mentoring could be daunting if appropriate parameters are not implemented. Doug explained what the responsibilities of the mentor could look like,

[The] buddy or mentor would need to be pretty proactive. They would need to be one of those people that grabs you by the scruff the neck [and] say ring you up on a day that there is a meeting and say 'right, you coming to the meeting?' and make sure you're staying engaged if you like and perhaps you know, ring you up on a Sunday night or Saturday maybe to have a chat and ask how the game went, what your views were. You could talk about things like the sideline was a bit vocal this game, or the two teams were just out there for a brawl. They weren't out to play rugby, so it was a bit disappointing type [of] stuff.

While mentoring can take many forms, the mentor and mentee engagement levels can vary, which ultimately reduces its overall impact as a system-wide support mechanism for referees. Numerous ECRs put forth informal support systems as an area for improvement for RRAs. Ian specifically called for more continuity from those providing informal support.

I think when you first sign up to reffing, they should assign someone within the referee club to that person and go for the first year. Follow them around. You know, I get everyone's got time constraints. But if they can make even every third game or something like that, at least that's giving them some work-ons they could take back. So, when you do your weekly session, they can say, look, this is the work-ons tonight as a referee group. We'll look at that and do some work on that to help you.

As a result of referee coach shortages, many ECRs can find themselves feeling unsupported by their RRAs. Therefore, developing a more formalised mentoring system to streamline support for officials past their first year would bridge the current gap that is evident. It would also foster a sense of community which is an important aspect of the refereeing experience (Baldwin & Vallance, 2016a; Cuskelly & Hoye, 2004; C. E. Gray & Wilson, 2008; Kellett & Warner, 2011; Livingston & Forbes, 2017; Parsons & Bairner,

2015; Ridinger, 2015; Warner et al., 2013; Wolfson & Neave, 2007). Not only would a mentoring programme support ECRs' social connections with other referees, but it would also provide them with someone who can support them through issues they may experience. Unfortunately, and in addition to disparate support systems, ECRs also perceive inequity in the community.

6.4 Perceptions of Inequity

Recently, NZR has undertaken a journey to reduce inequity in several forms. This is an important consideration for ECRs too, as they conveyed a series of related sentiments. Therefore, the fourth theme which is illustrative of the ECR experience captures referee stories of being treated unequally. Favoursing subgroups has been found to detract from the officiating experience (Kellett & Warner, 2011), so this is likely not unique to a particular sport or region. It is noteworthy that some benefit from inequity and others do not. This dynamic was evident from the stories that ECRs told in these interviews.

An example of perceived inequity articulated by ECRs relates to match appointments (Parsons & Bairner, 2015). This is important because if officials are not satisfied with the matches they are appointed to, they are less likely to continue (Meyer et al., 1993). Inequitable appointments can also hinder development (Kellett & Warner, 2011; Ridinger, Kim, et al., 2017; Warner et al., 2013). Overall, inequities amongst groups reduce the quality of the experience and negatively impact relationships (Kellett & Warner, 2011). The group of ECRs interviewed perceived inequity in terms of both opportunities and progression.

6.4.1 Opportunities

ECRs perceive challenging matches as an opportunity to develop their skills, so the extent to which these are distributed equitably is front of mind. In addition, if these appointments are proportionate to skill and experience, they are particularly relished. However, if they were not, it left ECRs feeling deflated. Having moved RRAs earlier in the year, Lewis talked about an opportunity he received:

On the Monday or Tuesday of that week, [I got an] email saying congratulations, you're going on an exchange to [PU], pretty much everything is going to be organised for you, and it was. I went up with two other referees. We all went in one vehicle. We went to the ground. I did a

Colts Under 21 game, and then AR'd the premier match. That was an awesome opportunity.

Other ECRs shared this sentiment and highlighted that challenging opportunities were welcomed. For example, Michael said, "the appointments committee were challenging you, so you didn't get to a level, even though it was your first year, didn't get to a level and just stayed there." We know that being given these opportunities creates affinity and supports one's development as a referee (Jordan et al., 2019). Quentin described a couple of opportunities he was afforded.

I've gone on numerous national trips. I've gone down to Christchurch and Wellington a few times to just referee on exchange, and I didn't have to pay for a thing to go away, which is really cool. In terms of up here in [RRA], the games that I've been able to referee like doing Premier rugby and 1st XV rugby. I've refereed a 1A final and a Premier final, and I've only done five years [of] active refereeing, so I think in that time, I've been quite fortunate, and I've done heaps of rep games.

Furthermore, Colin explained how he felt being given a match broadcast on national television.

It made me feel really good. I mean, it was good because they need[ed] somebody that wasn't going to muck it up. It made me feel grateful for the opportunity, and I guess I was very grateful for that opportunity.

Some ECRs seem satisfied with the matches they were appointed to, which has potentially influenced their continuation (Meyer et al., 1993). Unfortunately, this was not the case for all. ECRs expressed disappointment when not appointed to matches that are meaningful or challenging to them.

You just want to get thrown a bone every now and then like a good 1st XV game. Doesn't need to be every week. I'm not demanding, but yeah... There's a couple of 1st XV friendlies, and then a couple of bottom of the table, premier clashes, you know, like playing off [for] 9th and 10th where [the result] wouldn't have mattered, and they still went to the Prem Panel [referees]. (Dennis)

Doug also expressed disappointment related to his perception of inequity of appointments. "I get stuck, refereeing, the younger guys, that teenager U15-U16 stuff." Low-value matches can reduce a sense of role fulfilment, which can lead to discontinuation (Parsons & Bairner, 2015). Another consequence of inequitable opportunities is that it can negatively impact a referee's development (Kellett & Warner, 2011; Ridinger, Kim, et al., 2017; Warner et al., 2013). In the long-term, providing inequitable appointments means referees may not be suitably developed to referee higher grade matches when the opportunity arises.

While some referees are satisfied with the opportunities that are afforded to them, it likely comes at a cost to other referees. While not every referee will have the skills or capacity to referee higher-quality matches, administrators need to consider appointing referees to matches that challenge their skills and make them feel valued. Interviewees also expressed that they perceived inequity relating to their progression.

6.4.2 Progression

ECRs also highlighted their belief that inequities exist as it relates to their progression. Inequity relating to progression was generally identified as intentional development support targeting a particular demographic of referees. Some ECRs also articulated perceptions of progression inequity and a system in which younger referees were favoured. Colin captured several important sentiments related to referee progression in his comments.

It's been explicitly said to me, we're really supporting him at the moment, and he's 19. He's doing this, you know, okay, fine. Then the excuse is that [it is a] New Zealand Rugby (directive), but it's not really. How does it make me feel? I don't know. It makes me think that there's no clarity of thinking there about how this should be working. It should be based on your ability, not really your age.

In this instance, the perceived potential of a younger referee was favoured over Colin, a middle-aged man. At Doug's RRA, each referee is allocated a coach to support their development and progression. However, he was only notified of his coach partway through the season, and he ultimately perceived this as inequity related to his own potential progression.

It was only like, a week or two ago that we actually got assigned. Well, I got assigned my coach only a couple of weeks ago. They try to do it for all referees, but I think they're focused on the junior and teenage referees more so.

These sentiments are consistent with the officiating literature, in which it has been reported that officiating organisations value younger officials (Livingston & Forbes, 2017). Practically it means that younger referees are prioritised such that their promotion is prioritised, and the remaining resources are then distributed amongst the others. This focus on younger officials leaves others feeling undervalued.

I think their main concern is getting as many of their young guys into the national squad. I think there's too much focus on that. I think it's become very, I didn't believe it, I do believe it now, that it is very political. If you are not young and white, you won't get any further than Level Three. (Steven)

Furthermore, focusing on younger officials means that others who aspire to progress are missing out on opportunities, which has led to discontinuation.

What I know of the couple that I know that did quit. Was purely because they would see a referee coach once a season. They'd get virtually no feedback and wanted to move up panels. But there was no discussion from anyone asking them if they wanted to. What they were seeing was other people coming into their panel, moving up three panels, and they weren't even talked to. They were left there. So, then they're like, 'oh, I may as well not do it.' And that's those people that we're talking [about] they're not new up-and-coming refs coming through.

This sentiment would suggest that RRAs need to explicitly consider how their practice influences the opportunity for progression. It has been reported elsewhere that if officials do not perceive to be progressing through the pathway fast enough, they are likely to discontinue altogether (Sam et al., 2018). Therefore, it is essential that RRAs give all referees the opportunities to reach their potential. Inequities have also been reported where coaches are allocated disproportionately to younger referees.

While referees did report instances of inequity, those who benefit from the inequity are grateful for the support to progress.

The REO he's really pushing for me at the moment to put my name forward for NZR. There's [an] Under 16 tournament coming up which you've got to be nominated for, and you've got to meet certain requirements for that. He's really pushing me to get my law exam mark up and get my Bronco time down as low as I can to, to really sell it. He's really pushing for me to go for those opportunities and stuff that have come up. So, in that way, I mean, being the REO, he's really been pushing for that. (Oliver)

However, Oliver also acknowledges that the added support he is afforded impacts the support his peers may receive.

I mean, it's all right for me to be pushed forward, you know, to move through the ranks and eventually get up to refprem rugby, but there's a lot of guys that you know who are in their 40s and 50s and that sort of stuff who without them we wouldn't have a union because those junior games wouldn't get done and a lot of the time they don't get the coaches you know what I mean because you know the works put into those like myself.

It is well known that referee organisations tend to value younger officials over older ones (Livingston & Forbes, 2017) and thus duly supported to advance (Cuskelly & Hoyer, 2004). While understandable that resources are committed to younger referees to develop, middle-aged referees who become referees should not be shunned and should be provided equitable support. Although some have aspirations to achieve, others are supporting the community game and should also have an opportunity to progress. Feeling undervalued from a lack of progression opportunities could lead to a referee leaving (Dell et al., 2016). A study of Netball umpires in New Zealand argued that focusing on younger officials hinders retention and development (Sam et al., 2018). As young people are more transitory, it is conceivable to invest a lot of resource into an individual who moves away from the region or on to other pursuits prior to their progression.

6.5 Summary of and Reflection on ECR Sentiments

It is apparent that both RRAs and NZR are important to the experiences of ECRs as they are central to developing a quality experience. While there was some support for

widespread referee remuneration, several other sentiments came through more strongly. For example, its potential as a recruitment tool for young people was highlighted. However, ECRs also shared that they are worried that paying referees would bring the wrong people into the fold. All in all, the ECRs expressed mixed and sometimes contradictory feelings about RRAs more comprehensively paying officials. The perceptions of remuneration that were described in the interviews are likely the result of a long tradition of not paying rugby referees in New Zealand and their individual circumstance shaping their own position on whether they should be paid or not.

Further, it was highlighted that recognition is generally focused on high-performing referees, but there would be benefits from all referees being recognised equally. Milestones of all referees could be acknowledged more frequently and meaningfully. Based on the descriptions that ECRs provided it is evident that milestone recognition would be received warmly.

Support systems such as the first-year programme and mentoring are disparate across NZ's rugby referee community. It was evident that RRAs which provided first-year programmes were unable to continue that level of support. Furthermore, consistently facilitating support mechanisms such as mentoring would ensure all ECRs have a positive induction into refereeing, which could then be sustained long-term. Based on ECR reflections of support systems, it is quite clear that resourcing support systems beyond the first-year will have an impact on referee retention.

Finally, ECRs indicated that they experienced inequity whereby RRAs favoured younger ECRs as it related to opportunities and development. While younger referees may provide longer-term value to RRAs, it is also essential to consider the needs and aspirations of those who pick up refereeing later in life. The sentiments expressed by all referees seem to suggest that efforts to reduce the effects of inequity would ultimately bode well.

There are numerous opportunities for RRAs to improve the experience of ECRs, and some require minimal resources. Taken together, the ECR sentiments captured through these interviews indicate that all ECRs need to be supported to create a positive experience. This can include recognition, support systems and ensuring everyone is treated equally.

The findings of the interviews reported on within this chapter provide further insight into elements of the ECR experience. Especially as it relates to remuneration, recognition, and organisational support, all of which were explored in Study 2. The interviews also highlighted that ECRs perceived and experienced inequity which was not

apparent in Study 2. Of interest is that in some instances, sentiments shared in the interviews were at odds with insights from Study 2, which highlights the importance of the project's multimethod design. Overall, the findings of Study 3 indicate that the organisations like RRAs influence the experiences of ECRs. Some of the organisational influence is positive, while other areas need improvement. The following chapter will bring together the findings from each of the three studies. These overarching insights are discussed alongside relevant literature, implications are offered, and this project's contribution to theory development is also highlighted.

Chapter 7 - Discussion and Conclusions

The purpose of this project is to explore the experiences of Early Career Referees (ECRs) in the New Zealand rugby context. More specifically, this project aimed to generate insights in order to foster quality experiences for referees. To this end, the project was organised around five research questions related to (i) motivation, (ii) the influence of perceived organisation support, organisational commitment, and role commitment on the motivation-ITC relationship, (iii) other organisational factors related to continuation, (iv) SoC's role in the abuse-ITC relationship, and (v) organisational influence within a quality experience. Overall, this project generated numerous insights on the experience of ECRs, some consistent with or related to findings elsewhere, and others uncovered for the first time.

This discussion and conclusions chapter brings together the three studies of the wider project that were presented in previous chapters. This chapter is organised around the four main themes identified in Chapter 6, as the results from the other studies aligned into these four themes. Insights related to these four themes are perhaps the most important to come out of this wider project. These four prominent themes are remuneration, recognition, support, and inequity. Each of the five research questions are explicitly addressed afterwards. Further theoretical and practical implications beyond the scope of the four prominent themes discussed at the outset of the chapter are presented. This section is followed by an acknowledgement of limitations, ideas for future research, and a conclusion.

7.1 Prominent Themes

7.1.1 Remuneration

Sentiments related to remuneration are prominent and seem to affect the ECR experience dramatically. Perceptions regarding remuneration varied but were always stated unequivocally and at times emotively. Of particular note is that in Study 1 and 3, ECRs conveyed that remuneration may have a place in the rugby community, which would be a significant shift.

ECR sentiments regarding remuneration were inconsistent and, at times, contradictory. Collectively, the sentiments expressed by ECRs across the three studies indicate that perceptions of remuneration are not consistent, this makes for perhaps the most noteworthy takeaway about remuneration. In other words, the differing results across the three studies indicate there is no consensus on whether remuneration should be

implemented. This is highlighted in Study 3 where referees indicated that remuneration could be a good recruitment tool, especially for younger referees (Cuskelly & Hoye, 2004; Kellett & Warner, 2011; Livingston et al., 2017; Livingston & Forbes, 2016; Ridinger, 2015; Warner et al., 2013). However, ECRs were worried that it would attract individuals to refereeing who are in it for ‘the wrong reasons’. This insight is novel and not reported in the literature, but it is possible that these attitudes are unique to the current context, one in which remuneration is not normalised. The conflicting sentiments noted here are a cautionary tale for those who may ultimately implement a comprehensive remuneration system across the country, as it is not likely to be met with unanimous support.

ECRs in both Studies 1 and 3 alluded to the fact that several sports in New Zealand pay officials (Auckland Rugby League, 2022; Capital Football, 2021; Wellington Basketball Association, 2022). Sentiments related to this were prevalent, and it was clear that officials had considered this alongside their own experience of not being paid in rugby. The decision to remunerate in other sports is likely related to recruitment and retention objectives. However, this is not always made explicit in public-facing documents like annual reports, strategic plans etc. As it is so widespread elsewhere, it was unsurprising that ECRs offered sentiments about remuneration potentially being more comprehensively offered in rugby. Heightened awareness of remuneration elsewhere may lead rugby referees to feel undervalued, although this sentiment was not explicitly addressed across the studies.

The time-lapse from Study 1 to 3 is perhaps related to another important insight about remuneration in the rugby referee community. The Study 1 data was from as early as 2013, while Study 2 was conducted in 2020. Remuneration was only occasionally conveyed in the open-text responses of Study 1, yet it was discussed at length by most interviewees in Study 3. There is some indication that sentiments on this issue may be increasingly prominent amongst ECRs. This may, however, also be a function of interviewees feeling more comfortable or potentially being prompted more effectively than those completing surveys that participants knew were disseminated by the national body (i.e., NZR).

The current pandemic and wider economic circumstances are also worth reflecting on as it relates to ECR perceptions of remuneration. It has been reported that New Zealand is facing a cost of living crisis, with expenses of necessities hitting new highs (Stats NZ, 2022). Therefore, the impact of inflation means that individuals are now spending more money on essentials and may have less disposable income to cover the financial costs associated with volunteering. These costs often include fuel, equipment and travel, which

constitutes a financial burden reported elsewhere (Livingston & Forbes, 2017). In Studies 1 and 3, ECRs conveyed that remuneration would be welcomed to cover the expenses related to refereeing. While the “*remuneration could cover my expenses*” link was made by ECRs in studies carried out prior to the current period of inflation, it is likely that this would be even more top-of-mind in 2022 and beyond. To the best of the researcher’s knowledge, no studies have yet explored the impact of inflation on volunteering in sport, but this is no doubt relevant in the current context. It is likely that ongoing financial costs associated with refereeing and the increased cost of living in New Zealand will shape future remuneration-related sentiments amongst ECRs and probably SRs too. The wider implication here is that economic conditions should be considered when sport organisations make decisions about payment of officials.

Overall findings across the three studies highlight that NZR should very purposefully explore related sentiments and the potential practical implementation of referee remuneration moving forward. The commonplace remuneration of officials in other sports is well known amongst rugby referees, and it may be required to engage ECRs in future. Enticing the younger generation through remuneration could alleviate rugby referee shortages in future.

7.1.2 Recognition

RRAs can provide recognition to referees in multiple ways. This recognition was found to be an important element of the ECR experience in this research project. In response to numeric survey items in Studies 1 and 2, referees reported that they were mostly satisfied with the recognition of their work. However, in the more open-ended aspects of this project (i.e., open-text responses in Study 1 and interview data in Study 3), it became evident that while ECRs are aware of recognition efforts, it is disproportionately targeted toward those who are officiating higher-level matches. Reflective of reality or not, this is a very important perception for RRAs to be aware of.

Results from Study 2 provided further evidence that the more recognition and appreciation ECRs receive, the more likely they will continue, which is an important finding reported elsewhere (Auger et al., 2010; Dosseville et al., 2013; Hancock et al., 2015; Livingston et al., 2017). Considering that recognition and appreciation are effectively the only rewards some volunteer referees may receive, it is not surprising that it is related to their continuation. The relatively positive recognition perceptions amongst ECRs in Studies 1 and 2 is in contrast to related research where it has been identified that there is a lack of recognition by officiating organisations (Cuskelly & Hoye, 2004;

Hancock et al., 2015; Livingston & Forbes, 2017; Rainey & Hardy, 1999; Titlebaum et al., 2009). This highlights that current RRA practices around recognition should be continued as they are more effective and better perceived than what is going on in other sports in other parts of the world.

Findings from Studies 1 and 3 indicate that being recognised *in front of their peers* is a particularly meaningful part of the ECR experience. Study 3 interviewees repeatedly conveyed how referees are invited to the front of the room and recognised for special appointments and that this practice is valued. This is consistent with other studies where being shown recognition gives officials satisfaction (Baldwin & Vallance, 2016a; Spor & Dergisi, 2017), especially when in the company of their peers (Kellett & Warner, 2011). While this may be an ‘old-fashioned’ way of recognising officials, other methods such as photos or appointments in the newspaper (Hancock et al., 2015) are no longer applicable in the modern age. However, other tools, such as social media, are available to officiating organisations that may have a similar or better effect. Furthermore, ECRs indicated that using social media to recognise prestigious appointments positively impacted their experience. No doubt, every RRA has an opportunity to do this more often. Therefore, using social media to recognise ECRs could be a way in which RRAs can fulfil the recognition needs of ECRs. While ECRs welcomed these forms of recognition, it was apparent that only some referees received it.

Along with social media posts and presentations in front of their peers, ECRs also indicated that prizegiving or milestone celebrations are used to recognise the efforts of others. However, it was evident that this recognition is targeted at those refereeing higher-level matches, which means there is limited recognition of other officials (Cuskelly & Hoyer, 2004). Even though it is important to recognise successful referees, it is vital to recognise all officials, particularly those who go the extra mile to support the community game refereeing at lower levels. Not recognising all referees leads to a sense of some feeling undervalued and therefore considering discontinuation (Dell et al., 2016; Livingston & Forbes, 2016). These results suggest that RRAs need to consider an approach in which recognition is provided to all referees, thereby enhancing their experience.

The results from this project highlight that, for the most part, ECRs are satisfied with the recognition they receive from their RRA and/or PU. However, RRAs should continue developing strategies that recognise all referees, not only those appointed to key matches or who are otherwise amongst the high performers. One solution could be

implementing more frequent local-level celebrations of years of service to complement those already provided by the national body, NZR.

7.1.3 Support

The support that ECRs perceive defines their experience, and this was evident from findings across this research project. This seems to be especially the case during their initial engagement in the role. Volunteers and paid staff from RRAs most often provide this support. Similar to recognition, ECRs indicate that they are largely content with the support they receive. However, through the open-text responses and interviews in Studies 1 and 3, it was apparent that while referees perceive support around them, it is sometimes lacking, and this negatively affects their experience. The most prominent ECR sentiments having to do with perceptions of support that emerged across this project were about coaching and education.

Overall, referees indicated across this project that they were well supported by their RRA. This sentiment was evident in Studies 1 and 2 especially. This is noteworthy given we know that strong perceptions of organisational support are related to career commitment (S. Kim, 2017). Further, when perceptions of organisational support were explored by tenure in Study 2, it was found that for ECRs, perceived organisational support had a direct relationship with ITC. This is consistent with most previous research (Choi & Chiu, 2017; Giel & Breuer, 2020; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016) but notably at odds with Cuskelly and Hoyer (2013), who also explored rugby ECRs but in an Australian context. The positive ECR perceptions of organisational support found in the current research may be attributable to the fact that RRAs recognise that intensive support is needed in the first year and have put mechanisms in place as a result. Support for ECRs should be a priority as it's widely known that adverse early experiences can lead to negative outcomes for officials (Bernal et al., 2012; Cuskelly & Hoyer, 2004).

In Study 2, results indicate that if ECRs perceive that they both receive frequent coaching and that it is meaningful, they are more likely to continue. As this has not been previously tested in this way, it adds to the growing body of knowledge regarding officials' experience. The takeaway is that provision and/or frequency of support alone is not enough, but rather the extent to which it is perceived to be meaningful is the key.

Considered together, Studies 1 and 3 suggest that coaching is infrequent or non-existent for referees, similar to what has been reported elsewhere (Baldwin & Vallance, 2015, 2016a; Livingston & Forbes, 2017). When reflecting on the various insights across this research project, it is clear that infrequent coaching is detrimental to the development

of officials. Indeed, results from Study 2 indicate that access to coaching is associated with continuation. Therefore, RRAs need to develop and resource more referee coaching or find other means to support referee development (Warner et al., 2013; Webb et al., 2018). It is evident from the current findings that more referee coaches will very likely lead to good outcomes.

Results from Studies 1 and 2 suggest that RRAs are doing a good job of delivering education programmes to ECRs. Good education is an important support mechanism and prepares referees to deal with the rigours of the role (Ridinger, Kim, et al., 2017). The results from this project are positive and contrary to other studies that reported inadequate education programmes in other officiating contexts (Webb et al., 2018). In Study 2, it was found that the more positively ECRs perceive continued education, the more likely they are to continue, again mirroring the results of related research (Cuskelly & Hoyer, 2004; Minjung Kim et al., 2022; Ridinger, Kim, et al., 2017; Warner et al., 2013). In Study 3, some ECRs indicated that the first-year programme facilitated a comfortable induction into rugby refereeing.

It is evident that referee education content needs to remain current and engaging. ECRs conveyed in both Studies 1 and 3 that RRA educational material is often re-used and ineffective. In addition to currency, we know from elsewhere that educational content should also go beyond the theoretical elements of the game (Balch & Scott, 2007; Baldwin, 2013a; Cleland et al., 2017; Cuskelly & Hoyer, 2004; Dell et al., 2016; Walters et al., 2016; Warner et al., 2013; Webb et al., 2018). Doing so not only enhances the knowledge and skills of referees but can also influence the quality of refereeing. Therefore, it can be concluded that education material must be both current and have clear, practical application in order to foster a positive experience for ECRs. The flow on effects from quality ECR education are clear and justify resource expenditure. These include ECRs being more likely to stay and performing to a higher level. In turn, this is likely to lead to participants, coaches and spectators having a better experience too.

Overall, the findings of this project suggest that there is room for improvement for RRAs as it relates to support. Overall, many referees perceive a supportive environment, but there remains an opportunity to improve the coaching and ongoing education that is available. RRAs should explore other ways in which they can fill the gap left by the lack of referee coaches. RRAs may choose to formalise mentoring programmes whereby ECRs are allocated a mentor by the RRA, who in turn provides support of a more informal nature. Mentoring was described favourably by participants

in Study 3. Although there are opportunities to improve the support provided to ECRs, it should be done equitably.

7.1.4 Inequity

ECRs across this research project highlighted perceptions of inequity. Sentiments shared by ECRs indicated that RRAs perpetuated these inequities. In recent years many global, national, and regional sporting bodies have implemented diversity and inclusion strategies to ensure that all communities are welcomed, included, and treated equitably. In line with global trends, NZR is the first national sport organisation in New Zealand to receive the rainbow tick to identify their commitment towards rugby being a game for all (New Zealand Rugby, 2022). Despite this recognition for its efforts in diversity, equity and inclusion, referees highlighted that inequity exists in the NZR refereeing community. SRs were generally more negative on the organisation's role in the perceived inequity. ECRs specifically indicated that younger referees were supported more and perceived this as inequitable.

Across both Study 1 and 2, SRs reported lower mean scores than ECRs for support from RRAs as it related to being the best they can be, appreciation, support received to be an effective referee, and administrator considerations. These sentiments are potentially the result of inequitable resource allocation and/or decision-making across the refereeing community. Even a perception of inequity can negatively affect referees and lead to discontinuation (Kellett & Warner, 2011). The results here also suggest that the support referees receive diminishes as their career progresses, an insight which has been noted elsewhere (Livingston & Forbes, 2016). The decreased perception of support as one progresses was expected based on related published research, as was the perception of an inequitable focus on younger referees. In the current context, the latter may be reflective of NZR's wider high-performance culture around developing young talent.

ECRs recounted numerous experiences in Studies 1 and 3 in which younger referees were being prioritised. As a result, these younger referees were appointed to better matches, and more support was provided to develop their skills. This prioritisation of younger referees left referees feeling undervalued, and some referees described circumstances where it led to the discontinuation of other referees. These findings mirror what has been reported elsewhere, whereby officiating organisations value younger officials (Livingston & Forbes, 2017) and pressure them to advance (Cuskelly & Hoyer, 2004). Whilst it is understandable that RRAs invest resources into younger referees, this behaviour denies other referees the opportunity to develop. In a study of netball umpires

in New Zealand, it was reported that shifting the focus to recruiting younger officials may not yield favourable results in relation to overall retention and development objectives (Sam et al., 2018). While younger referees are potentially more likely to be selected into high-performance squads eventually and otherwise advance, the opportunities and development afforded to other referees are sacrificed. Therefore, RRAs should consider providing more equitable opportunities and development support to all referees. This will not only ensure that all referees feel valued, but it is also likely to increase the collective skill of referees. Furthermore, providing equitable opportunities and development to all referees could increase retention. Findings suggest RRAs should acknowledge these inequities and implement systems where a more equitable approach is developed and implemented. Providing equitable opportunities for all referees is likely to increase satisfaction, which is known to influence retention.

7.2 Theoretical Developments

Organisational Support Theory (OST) captures fairness, supervisor support and job conditions (Eisenberger & Huntington, 1986; Rhoades & Eisenberger, 2002). This extension of OST as a theoretical frame into a sport context featuring a voluntary refereeing workforce is an important contribution to the sport management literature. It explains how favourable treatments are perceived and lead to outcomes such as retention (Shanock et al., 2019). More specifically, results here suggest that a perception of organisational support is potentially more important to ECRs than SRs, which contributes to a more nuanced understanding of OST in regards to career/role stage. One of Shanock et al.'s (2019) OST principles is to enlist organisation representatives to convey organisational support and the perception of it. This has a very natural fit for a referee workforce that is deployed in locations across a geographical area. The clear implication here is that referee organisations should make every effort to get out and support referees in situ (i.e., at the field). This support could take the form of engaging with referees in a supportive manner before and after matches. While many rugby referee managers attempt to do this and might claim that resources limit more focus on this, the results suggest this would make a difference, particularly for those refereeing for five years or less.

While this project did not follow the ECR journey, retrospective information collected allows for an understanding of the ECR experience in reference to the Referee Attrition Model (RAM). The results of this project indicate that elements identified in the RAM hold true for ECRs in this context. In Study 2, it was found that intrinsic (Giel & Breuer, 2020; Minjung Kim et al., 2022; S. Kim, 2017; Ridinger, Kim, et al., 2017) and

sport-related (Livingston & Forbes, 2017, 2016; Ridinger, 2015) factors influence one's initial foray into rugby refereeing. From Study 3, the indication is that ECRs are very supportive of mentoring programmes and are perhaps advocating for more of it. At the same time, other factors such as socialisation into the referee community and remuneration were not found to influence participation. Further understanding of the RAM could explore whether remuneration influences officials' involvement in sports that pay referees. While recruitment, according to the RAM, was equal parts participant-driven and organisation driven, the retention stage focuses more on the organisation's role in encouraging continued participation.

The RAM highlights that problematic social interactions (abuse), training and mentoring, and the lack of a refereeing community influenced discontinuation at role onset (Warner et al., 2013). In Study 2, continuing education and SoC were positively related to ITC (Minjung Kim et al., 2022; Ridinger, Kim, et al., 2017; Warner et al., 2013), indicating that the more positively ECRs perceive these factors, the more likely they are to continue. However, the prevalence of abuse was not found to impact continuation. Yet, SoC influenced the abuse-ITC relationship, in line with findings elsewhere (Kellett & Shilbury, 2007). Findings here align with several factors of the RAM Retention stage but with the notable exception of abuse. Further exploration is required within the New Zealand context to understand if the abuse of officials does influence continuation or whether rugby referees have been conditioned to deal with it differently. While many ECRs are driven by personal or sport-related motivation, some want to progress and advance their careers. Unfortunately, for those wishing to advance, the behaviours of administrators can negatively influence their experience.

ECRs indicated that inequality existed whereby younger referees were provided more support and opportunities to develop and succeed, thereby providing further evidence of an insight reported elsewhere (Livingston & Forbes, 2017). Whilst some individuals, who may have started later, still aspire to achieve, they indicated they are held back because resources are being prioritised towards younger referees. These findings align to the RAM as ECRs believe the support to younger referees was not provided on merit (Warner et al., 2013). Broadly, the results of this project provide evidence in support of the RAM and specifically in terms of ECRs as a vitally important subgroup. However, some aspects of the RAM, including social integration and abuse, are not really supported by the data generated in this project. Thus, further exploration is required to understand the generalisability of this model outside of the North American context.

7.3 Practical Implications

The results of this project have far-reaching implications for rugby referee managers who are responsible for recruitment and retention. This section builds on various implications offered earlier in alongside the remuneration, recognition, support, and inequity themes.

This project provides further evidence that perceived organisational support directly affects ITC for ECRs. It is worth emphasising how important it is for organisations to both be supportive *and* ensure they are perceived that way. In officiating contexts, there are several traditional ways in which organisations can be supportive: education programmes, coaching, and recognition. However, being responsive to questions, available when things go wrong and supportive when referees face difficult situations also reflect a supportive culture and were highlighted by referees across this research project. That organisations should be supportive of referees is probably self-evident to most, but how organisations prioritise and resource support should be considered on an ongoing basis. Furthermore, it is beneficial for sport organisations to highlight the ways they are being supportive such that the referee community is aware of it, regardless of whether every individual benefits directly.

This project has provided new insights about referee tenure that those managing referees should consider. For many reasons, referee managers often offer referees a one size fits all programme regardless of tenure. However, the results from this project indicate that referees are not a homogenous group. ECRs and SRs have different needs, which must be considered when implementing support and development initiatives. In many instances, “refereeing is highly dependent at the grassroots level on attracting and recruiting volunteers to become accredited and qualified and to maintain this involvement in the game over a number of years” (Baldwin & Vallance, 2016a, p. 49). This mindset needs to shift, whereby support is tailored to meet the needs of each group. The findings suggest that referee managers should uniquely prioritise and tailor support, particularly for the longest-tenured referees in their community.

This project is one of few to explore officials’ motivations at onset and through their careers (e.g. Auger et al., 2010; Hancock et al., 2015). It was found that motivation to begin and continue refereeing within the New Zealand rugby context is different, especially for ECRs. None of the motivation dimensions explored in this project offer a singular characterisation of onset motivation for ECRs. However, intrinsic motivation is most important among the dimensions as a significant driver of continuing participation.

The practical implication is that motivation at role onset is multifaceted, and this should be considered in efforts to recruit new officials. Resonant messaging could highlight a combination of themes, including the challenge, fitness benefits, helping out the sport, giving back to the sport, rewards, recognition, and camaraderie which can be fostered, and perhaps others. Explicitly identifying multiple aspects of the referee experience may touch on relevant motivation and therefore make refereeing more attractive for newcomers. This sort of multifaceted or holistic approach to messaging is likely to be more effective than the rather one-dimensional “Be In The Game” campaign currently being implemented (New Zealand Rugby, n.d.).

Insights emerged from Study 2 in line with Kellett and Shilbury (2007) insofar as the presence of a SoC can mitigate the effect of abuse on the continuation of referees. This finding suggests that RRAs and officiating organisations should work hard to build an SoC as it can help referees work through their experiences of abuse. An SoC can be fostered through mentoring programmes, social events, or even adding socialising elements to training and development evenings. Being comfortable with peers means a referee can share experiences and enable referees to develop tools to deal with abuse more constructively.

Having carried out this multi-method exploration of the ECR experience, it is also possible to reflect on the nature of insights and how this relates to data collection in refereeing contexts. This has an implication for how officiating organisations might best collect insights from their members. In this project, survey data seemed to suggest referees had very positive perceptions of the experience, but interviews and open-text response opportunities gave participants the chance to convey perceptions in their own words, thereby leading to a more nuanced understanding. Although surveys are the most cost-effective way to capture officials’ sentiments, being able to talk with officials and probe further is helpful.

7.4 Research Aim and Questions

The aim of this project was to generate insights in order to foster quality experiences for early-career rugby referees in New Zealand. Five research questions were developed to guide the researcher’s pursuit of that aim. The following sections explicitly address the aim and research questions.

7.4.1 Research Aim

In this project, there was a focus on organisational aspects of the ECR experience within the New Zealand rugby context. Based on the structure of the rugby community in New Zealand, RRAs are most often responsible for the experiences of ECRs. Put simply, the findings across the three studies highlight that RRAs play a significant role in the ECR experience.

Elsewhere, it has been reported that officiating organisations are very focused on administering and appointing officials (Livingston et al., 2017), perhaps in lieu of providing support and development. While it has been recently reported that abuse negatively impacts the recruitment and retention of officials (Dawson et al., 2021; Jacobs et al., 2020; Webb et al., 2017, 2018; Webb, Dicks, et al., 2019; Webb, Rayner, et al., 2019), the insights gathered in this project indicate that providing support could be as important as reducing abuse to foster a quality experience.

The results from this project identify that favouritism, a lack of support and other negative behaviours undertaken by people at RRAs can reduce the quality of an ECRs experience, leading to discontinuation. Overall, it is apparent from this project that RRAs are doing an excellent job fostering a quality experience for some referees but not all. Therefore, this project builds on findings from related research elsewhere, whereby organisational shortcomings (Hancock et al., 2015; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016; Sam et al., 2018) explain the less than ideal experiences for some officials.

7.4.2 Research Question 1

Binary Logistic Regression analyses were used to understand which motivation dimensions influence the onset and continuation of ECRs. Most motivation dimensions were found to have a relationship with ITC when tested individually for both beginning and continuing to referee. However, no single motivation dimension definitively explains why ECRs began refereeing rugby. This finding supports the notion that multiple factors influence entry into the officiating role (Hancock et al., 2015). However, it was found that intrinsic motivation explained why ECRs continue to referee.

7.4.3 Research Question 2

Binary Logistic Regression analyses were also used to test the intervening influences of POS, OC, and RC on the ITC-Motivation relationship for ECRs. Surprisingly POS did not moderate the motivation-ITC relationship for any of the four

motivation dimensions tested. It was anticipated that it would positively influence the relationship as many referees initially provided more support (Livingston & Forbes, 2017). It may be that ECRs have not had enough exposure to the organisation to perceive support, thereby influencing their motivation and ITC. None of the three components of OC and RC had a moderating effect. It seems that ECR motivation drives continuation on its own, independent of commitment to either the role or the organisation.

7.4.4 Research Question 3

The influence of five other organisational factors on ITC was tested using Binary Logistic Regression analyses in Study 2. Continuing education, access to coaching and recognition had univariate, positive relationships with ITC. However, when the factors were considered together, no single organisational factor explained the continuation of ECRs. These are in line with the notion that retention is complex (Auger et al., 2010). However, it is important to continue to consider how to explore and ultimately measure continuing education, access to coaching and recognition among ECRs.

7.4.5 Research Question 4

Building on Kellett and Shilbury (2007), Study 2 explored the influence of SoC on the abuse-ITC relationship. A Binary Logistic Regression analysis was used to understand the relationships between the constructs of interest. The results indicated that SoC did moderate the abuse-ITC relationship, which is consistent with previous literature (Kellett & Shilbury, 2007).

7.4.6 Research Question 5

Four themes were derived from interview data in Study 3 to understand how RRAs contribute to the ECR experience. ECRs conveyed a degree of remuneration ambivalence, called for broader recognition, identified disparate support systems, and expressed perceptions of inequity. The interview data highlighted that while RRAs are, on the whole, doing a positive job supporting and developing ECRs, there are still organisational shortcomings, a conclusion that has been drawn elsewhere as well (Hancock et al., 2015; S. Kim, 2017; Livingston et al., 2017; Livingston & Forbes, 2016; Sam et al., 2018). The findings indicate that RRAs need to provide a holistic and inclusive experience for all referees to ensure they have a positive experience and continue.

7.5 Limitations

Like most of the officiating literature, the primary limitation of the studies in this project are cross-sectional designs. Quantitative studies with multiple data collection sets at different points can lead to a more rigorous analysis of the constructs (Funk et al., 2016). Cross-sectional studies can also potentially be affected by social desirability and demand effect bias (Herrmann et al., 2016). While ITC is widely used as an outcome variable in the wider sport management literature (Cuskelly & Hoyer, 2013; S. Kim, 2017; Orviz-Martínez et al., 2021), it is only a proxy for actual behaviour. Data were collected towards the end of the season, which was deemed most appropriate, but it is possible that heightened emotions led to inaccurate reporting of ITC.

While respondents in Studies 1 and 2 represented the gender and ethnic makeup of the refereeing population of New Zealand, this was not the case in Study 3. All interview respondents were male, and all bar one could be characterised as New Zealand European, which are other limitations. While this group makes up the majority of rugby referees in New Zealand, the different experiences of people from minority communities are missed. As a result, systemic issues such as racism, sexism or homophobia may not have been picked up as those interviewed may not have experienced such discrimination. One way to mitigate this limitation is to ensure that those expressing interest in interviews are diverse (Morgan, 2008), which admittedly was a challenge across this study. It is vital to provide appropriate incentives that will encourage diverse communities to express interest and participate in officiating research projects of the future.

7.6 Recommendations for Future Research

This project is one of two that has explored the experiences of officials using a tenure-based approach. Interestingly, the only other study to explore ECRs was also in the context of rugby but in Australia (Cuskelly & Hoyer, 2013). While it has been widely reported that first-year attrition is up to 60% in the first year (Bernal et al., 2012; Cuskelly & Hoyer, 2004; S. L. Forbes & Livingston, 2013) and ECRs are likely to discontinue within their first five years (Cuskelly & Hoyer, 2004; MacMahon et al., 2014), there is limited literature exploring why. As demonstrated, referees are not a homogenous group, but further exploration is required to understand what other differences may exist. Therefore, it is recommended that this tenure-based approach is used within different contexts such as sports and regions to gain a deeper understanding of the differences that exist.

While this project used a tenure-based approach to understand the experiences of those new to refereeing rugby, it is evident that the experience of younger ECRs was not captured comprehensively. Previous studies have stated that younger officials should be explored in future research (Baldwin & Vallance, 2016a; Livingston & Forbes, 2016; Webb, 2020). Therefore, future research on officials should consider focusing on the younger cohort as a further subset of ECRs.

This project extends the work of Hancock and colleagues (2015) by exploring onset and continuing referee motivation in a different sporting and geographical context. However, there is still little known about what motivates officials initially. Much of the literature on the motivation of officials focuses on factors that influence continued participation. Further, there is a lack of studies that have explicitly explored onset motivation. Further study of onset motivation will extend the literature and build on what has been reported here.

7.7 Conclusion

This project was focused on the role of RRAs on the experiences of ECRs in the context of rugby in New Zealand. It employed a three-study approach whereby the industry partner, NZR, provided registration and survey data, a quantitative survey was disseminated, and the researcher conducted follow-up interviews. Overall, the aim of the project was to generate insights to inform the provision of quality experiences for ECRs. Carrying out a series of studies led to three separate but complementary data sets.

The data provided by NZR for Study 1 provided context for this project. The insights provided a snapshot of the ECR experience, and it was evident that there are opportunities to improve retention. Further, it was found that referees should not be treated as a homogenous group, and RRAs play a vital role in the ECR experience. The results indicated that while there are positives within the system, there are plenty of opportunities to improve.

Study 2 was a population-wide survey focusing on motivation, POS, RC, OC, ITC, and relationships among them. A series of other organisational factors were separately analysed alongside ITC. While a single motivation dimension could not explain why ECRs begin refereeing, intrinsic motivation explained their continued participation. POS did not interact with any of the motivation-ITC relationships for ECRs but was directly related to ITC. Continued education, access to coaching and recognition all have a role to play for ITC as well. Further, SoC influenced the abuse-ITC relationship

for ECRs. Study 2 reinforced that much of what affects the ECR experience lies within the remit of RRAs.

Four key themes were derived from the interviews conducted in Study 3. These were remuneration ambivalence, broader recognition, disparate support systems, and perceptions of inequity. While some positive sentiments were shared, several issues were highlighted that could improve the ECR experience if addressed. More frequent recognition, providing other support mechanisms in lieu of coaches and ensuring that support and opportunities are equally distributed are all likely to help. It was apparent through this study that there are aspects of ECR experience they are not satisfied with. These aspects were generally driven by the administrators and leaders within RRAs, suggesting that they play a prominent role in the experiences of ECRs.

In conclusion, RRAs and, more broadly, officiating organisations play a prominent role in the experiences of ECRs. While many studies have explored why officials quit, this project examined why they continue. While motivations can explain their initial and continued participation on some accounts, the role of the officiating organisation is central to retention. Therefore, if officials perceive negative feelings towards their organisation (i.e., favouritism, lack of support or recognition), they are not likely to continue. Thus, the results of this three-study project identify that the more positive experiences ECRs have, the more likely they will continue as referees. Ultimately, the onus is firmly on the officiating organisation to provide a positive experience that ensures retention.

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Appendix A - Ethics Approval



Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

19 August 2019

Michael Naylor
Faculty of Health and Environmental Sciences

Dear Michael

Re Ethics Application: **19/280 Blowing the whistle: Exploring the experiences of New Zealand rugby referees**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 19 August 2022.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the [Auckland University of Technology Code of Conduct for Research](#) and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted. When the research is undertaken outside New Zealand, you need to meet all ethical, legal, and locality obligations or requirements for those jurisdictions.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through <http://www.aut.ac.nz/research/researchethics>

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: javeed.ali@aut.ac.nz; Lesley Ferkins

Appendix B - Pilot Study Questionnaire

New Zealand Rugby Referees Pilot Questionnaire - ARRA

What follows is a short "pilot" questionnaire for NZ rugby referees that precedes a more comprehensive questionnaire that will roll-out later in the year.

There are some aspects of your experience that haven't been explored before and we want to make sure we are going about it effectively.

We are particularly interested in whether two sets of three questions are understandable and relevant to you. Other important aspects of your experience as an official will be captured in the full questionnaire later in the year.

This questionnaire should take no longer than 10 minutes to complete

Participant Information Sheet Survey information sheet **Date Information Sheet Produced:** 17 June 2019 **Project Title** Blowing the Whistle: Exploring the experience of New Zealand rugby referees **An Invitation** I would like to invite you to participate in this collaborative research project between Auckland University of Technology and New Zealand Rugby by completing a survey. New Zealand Rugby are a financial partner of this research and all results will be aggregated protecting your privacy. Completing this survey is purely voluntary and optional, should you decide to begin you are more than welcome to withdraw from the research project before data collection has ended. If you are interested to be interviewed regarding your experiences as a rugby referee, you will be asked to provide your contact details at the conclusion of the survey. My name is Javeed Ali and this research project is part of my pursuit for a Doctor of Philosophy. The data collected from this survey may possibly be used to aid future research projects. **What is the purpose of this research?** The purpose of this research is to explore and understand the experiences of rugby referees in New Zealand. This research will result in a thesis for my Doctor of Philosophy; however, the findings may also be used for academic publications and presentations. This survey is a pilot which intends to test the validity and reliability of the statements. The purpose of this survey is to understand if the statements we have developed accurately test the concepts of interest in the wider study. **How was I identified and why am I being invited to participate in this research?** You have been selected to partake in this research project as you are a registered rugby referee with New Zealand Rugby. New Zealand Rugby, on behalf of its provincial unions, is a key partner of this study. **How do I agree to participate in this research?** Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. To agree to take part in this research please click I agree and complete this survey. **What will happen in this research?** Should you agree to participate in this research project you will be required to complete two online based surveys, with the opportunity to participate in an interview. The data from the surveys and interviews will inform a nationwide study exploring the experiences of rugby referees in New Zealand. **What are the discomforts and risks?** No discomforts or risks are anticipated when participating within this study. **What**

are the benefits? The benefits for you, as the participant of the research project, is that you are aiding New Zealand Rugby understand the experiences of New Zealand Rugby referees. It is anticipated that the results from this study will support New Zealand Rugby and its provincial unions to better cater to the needs of New Zealand rugby referees. This research will assist myself in attaining my Doctor of Philosophy qualification. **How will my privacy be protected?** Participants in this research project will remain confidential at all time. The answers to the survey will be anonymous, as the researcher I will not be able to identify individuals who have taken the survey. Once it has been completed it will be stored in a locked cupboard as outlined by the Auckland University of Technology Ethics Committee. In the report to New Zealand Rugby you will not be identifiable as your data will be aggregated. **What are the costs of participating in this research?** This survey should take no longer than 15 minutes to complete. It is anticipated no financial costs will be incurred **What opportunity do I have to consider this invitation?** You have two weeks from the original email notification of the survey **Will I receive feedback on the results of this research?** As a participant you will not get individual feedback regarding the research however, New Zealand Rugby will receive information regarding the results of this research. **What do I do if I have concerns about this research?** Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Michael Naylor, michael.naylor@aut.ac.nz, 921 9999 ext 6627 Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038. **Whom do I contact for further information about this research?** Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows: Researcher Contact Details: Javeed Ali javeed.ali@aut.ac.nz 921 9999 ext 6627 Project Supervisor Contact Details: Michael Naylor michael.naylor@aut.ac.nz 921 9999 ext 6627 **Approved by the Auckland University of Technology Ethics Committee on 19 August 2019, AUTEK Reference number 19/280**

Do you consent to participating in this study?

☐ Yes

☐ No

Please enter your year of birth

What referee panel are you in?

- ☐ First Year
☐ JRC
☐ C Panel
☐ B Panel
☐ Premier
☐ Other _____

Thinking about why you referee, to what extent do you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am a rugby referee because my engagement is flexible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a rugby referee because the feelings are similar to playing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a rugby referee because I'm more physically suited to this role than playing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are the three items in the previous question understandable and relevant to you and your role as a rugby referee? If not, please explain why. Are there words or phrases that might help us better capture this aspect of refereeing?

To what extent do you agree with the following statements
In the last 12 months...

	Strongl y disagre e	Disagre e	Somewha t disagree	Neither agree nor disagre e	Somewha t agree	Agre e	Strongl y agree
I received coaching/mentorin g frequently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would have liked more referee coaching/mentorin g	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have received sufficient coaching/mentorin g on my refereeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are the three items in the previous question understandable and relevant to you and your role as a referee? If not, please explain why. Are there words or phrases that might help us better capture this aspect of refereeing?

Appendix C - Main Study Questionnaire

New Zealand Rugby Referees Experience Questionnaire

Auckland University of Technology in partnership with New Zealand Rugby are exploring the experiences of rugby referees in New Zealand.

In this survey, you will be asked to answer several questions regarding your experience as a rugby referee. This survey should take no longer than 30 minutes to complete

Participant Information Sheet Survey information sheet **Date Information Sheet Produced:** 17 June 2019 **Project Title** Blowing the Whistle: Exploring the experiences of New Zealand rugby referees **An Invitation** I would like to invite you to participate in this collaborative research project between Auckland University of Technology and New Zealand Rugby by completing a survey. New Zealand Rugby are a financial partner of this research and all results will be aggregated protecting your privacy. Completing this survey is purely voluntary and optional, should you decide to begin the survey, you can withdraw your participation at any time until your response is submitted. As once this has occurred responses cannot be identified or withdrawn. If you are interested to be interviewed regarding your experiences as a rugby referee, you will be asked to provide your contact details at the conclusion of the survey. My name is Javeed Ali and this research project is part of my pursuit for a Doctor of Philosophy. The data collected from this survey may possibly be used to aid future research projects. **What is the purpose of this research?** The purpose of this research is to explore and understand the experiences of rugby referees in New Zealand. This research will result in a thesis for my Doctor of Philosophy. However, the findings may also be used for academic publications and presentations. **How was I identified and why am I being invited to participate in this research?** You have been selected to partake in this research project as you are a registered rugby referee with New Zealand Rugby. New Zealand Rugby, on behalf of its provincial unions, is a key partner of this study. This survey will explore multiple facets of your refereeing experience and how it impacts on your intention to continue. Your views will support the development of the officiating experience to aid retention. **How do I agree to participate in this research?** Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. To agree to take part in this research please click I agree and complete this survey. **What will happen in this research?** Should you agree to participate in this research project you will be required to complete one online based survey, with the opportunity to participate in an interview. The survey will be sent to you by New Zealand Rugby during the 2020 club rugby season. The data from the surveys and interviews will inform a nationwide study exploring the experiences of rugby referees in New Zealand. **What are the discomforts and risks?** No discomforts or risks are anticipated when participating within this study. **What are the benefits?** The benefits for you, as the participant of the research project, is that you are aiding New Zealand Rugby understand the experiences of New Zealand Rugby referees. It is anticipated that the results from this study will support New Zealand Rugby and its provincial unions to better cater to the

needs of New Zealand rugby referees. This research will assist myself in attaining my Doctor of Philosophy qualification. **How will my privacy be protected?** Participants in this research project will remain confidential at all time. The answers to the survey will be anonymous, as the researcher I will not be able to identify individuals who have taken the survey. Once it has been completed it will be stored in a locked cupboard as outlined by the Auckland University of Technology Ethics Committee. In the report to New Zealand Rugby you will not be identifiable as your data will be aggregated. **What are the costs of participating in this research?** This survey should take no longer than 30 minutes to complete. It is anticipated no financial costs will be incurred **What opportunity do I have to consider this invitation?** You have two weeks from the original email notification of the survey **Will I receive feedback on the results of this research?** As a participant you will not get individual feedback regarding the research however, New Zealand Rugby will receive information regarding the results of this research. **What do I do if I have concerns about this research?** Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Michael Naylor, michael.naylor@aut.ac.nz, 921 9999 ext 6627 Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTC, Dr Carina Mears, ethics@aut.ac.nz, 921 9999 ext 6038. **Whom do I contact for further information about this research?** You are also able to contact the research team as follows: Researcher Contact Details: Javeed Ali javeed.ali@aut.ac.nz 921 9999 ext 6627 Project Supervisor Contact Details: Michael Naylor michael.naylor@aut.ac.nz 921 9999 ext 6627 **Approved by the Auckland University of Technology Ethics Committee on 1 October 2019, AUTC Reference number 19/280.**

Do you agree to participate in this study?

- ☐ Yes
- ☐ No

Are you an active rugby referee?

- ☐ Yes
- ☐ No

Please select your gender

- ☐ Male
- ☐ Female
- ☐ Gender Diverse

Please select your month of birth

- ☐ January
- ☐ February
- ☐ March
- ☐ April
- ☐ May
- ☐ June
- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ November
- ☐ December

Please select your age

- ☐ 10-14 years old
- ☐ 15-19 years old
- ☐ 20-24 years old
- ☐ 25-29 years old
- ☐ 30-34 years old
- ☐ 35-39 years old
- ☐ 40-44 years old
- ☐ 45-49 years old
- ☐ 50-54 years old
- ☐ 55-59 years old
- ☐ 60-64 years old
- ☐ 65+ years old

Which ethnic group(s) do you identify with?

- ☐ NZ European
- ☐ Maori
- ☐ Pacific Peoples
- ☐ Asian
- ☐ Middle Eastern
- ☐ Latin American
- ☐ African
- ☐ Other _____

What is your current relationship status?

- ☐ Single
- ☐ In a relationship
- ☐ Married
- ☐ Other _____
- ☐ Separated
- ☐ Engaged
- ☐ Divorced

What is your highest academic qualification?

- ☐ Primary School
- ☐ Secondary/High School
- ☐ Tertiary Education
- ☐ Post-Graduate Education
- ☐ Prefer not to answer
- ☐ Trade/Vocational Training
- ☐ Did not attend school

What is your main occupation?

- ☐ Manager
- ☐ Professional
- ☐ Technician or Trades Worker
- ☐ Community or Personal Service Worker
- ☐ Other _____
- ☐ Sales Worker
- ☐ Machinery Operator or Driver
- ☐ Labourer
- ☐ Clerical or Administrative Worker

Which Rugby Referees' Association are you a member of?

- ☐ Auckland
- ☐ Bay of Plenty
- ☐ Buller
- ☐ Canterbury
- ☐ Counties Manukau
- ☐ East Coast
- ☐ Hawkes Bay
- ☐ Horowhenua-Kapiti
- ☐ King Country
- ☐ Manawatu
- ☐ Mid-Canterbury
- ☐ North Harbour
- ☐ North Otago
- ☐ Other _____
- ☐ Northland
- ☐ Otago
- ☐ Poverty Bay
- ☐ Southland
- ☐ South Canterbury
- ☐ Taranaki
- ☐ Tasman

- ☐ Thames Valley
- ☐ Waikato
- ☐ Wairarapa Bush
- ☐ Wanganui
- ☐ Wellington
- ☐ West Coast

Which age grade(s) do you referee?

- ☐ Junior (7-12 year olds)
- ☐ Teenage (13-18 year olds)
- ☐ Senior (19 years and older)
- ☐ Other _____

How many years have you refereed rugby for?

On average, how many fixtures do you referee each week?

Do you currently play rugby?

- ☐ Yes
- ☐ No

Did you play rugby prior to becoming a rugby referee?

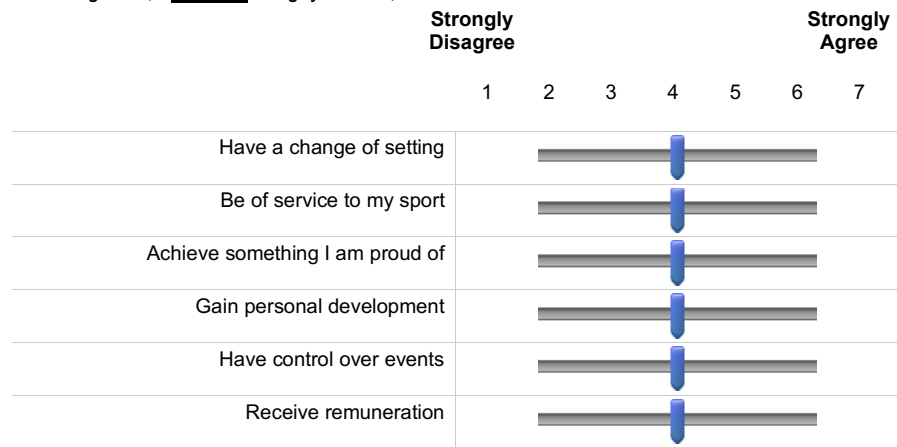
- ☐ Yes
- ☐ No

What is the highest level of rugby you have played?

- ☐ International
- ☐ Franchise (Super Rugby or equivalent)
- ☐ Provincial (Mitre 10 Cup NPC or equivalent)
- ☐ Age-Grade Representative (U21, U20, U19, U18, U17, U16 regional or equivalent)
- ☐ Premier Club
- ☐ Other Senior Club (e.g. Senior B, Prem Reserve, Under 21, Under 85kg etc.)
- ☐ Junior Club
- ☐ 1st XV Secondary School
- ☐ Other Secondary School
- ☐ Other _____

Using the slider, indicate your level of agreement with the following statements.

Thinking back, I became a rugby referee, in order to:



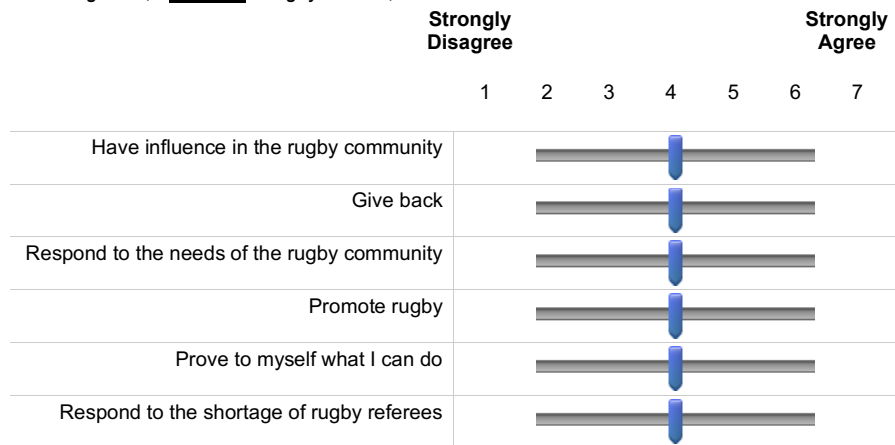
Using the slider, indicate your level of agreement with the following statements.

Thinking back, I became a rugby referee, in order to:



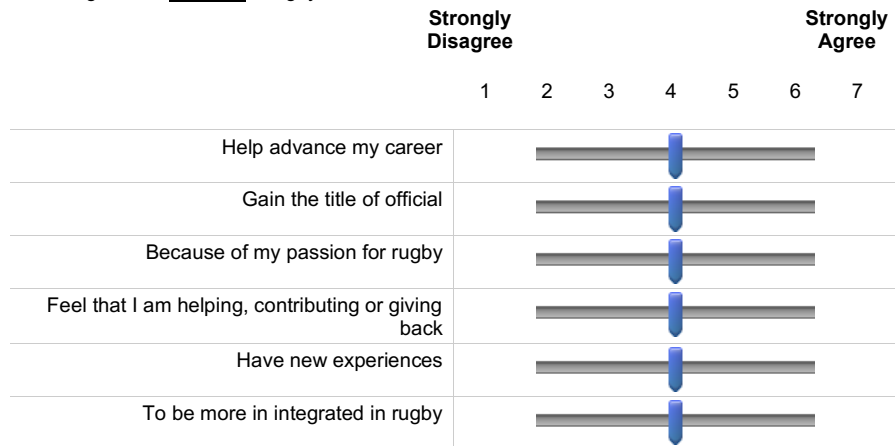
Using the slider, indicate your level of agreement with the following statements.

Thinking back, I became a rugby referee, in order to:








Using the slider, indicate your level of agreement with the following statements.

Thinking back, I became a rugby referee, in order to:








Using the slider, indicate your level of agreement with the following statements.

I continue to be a rugby referee because...

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I have a task that fits my capabilities								
I feel that I am progressing personally								
I have fun								
I feel a sense of belonging								
I receive appreciation from others								






Using the slider, indicate your level of agreement with the following statements.

I continue to be a rugby referee because...

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I feel respected as a rugby referee								
I enjoy being a rugby referee								
I feel supported by my rugby referees' association								
I receive suitable remuneration								
I perceive myself as competent								





Using the slider, indicate your level of agreement with the following statements.

I **continue** to be a rugby referee because...

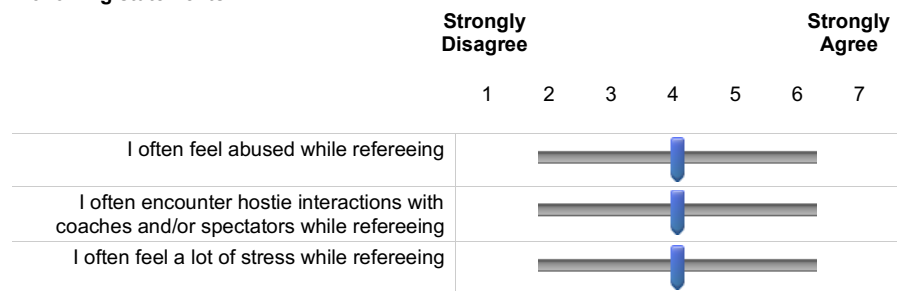
	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I have the opportunity to be challenged								
I feel that I am obliged to remain								
To be informed about what is happening in my referees' association								
I have the opportunity to advance								
I feel useful								

Using the slider, indicate your level of agreement with the following statements.

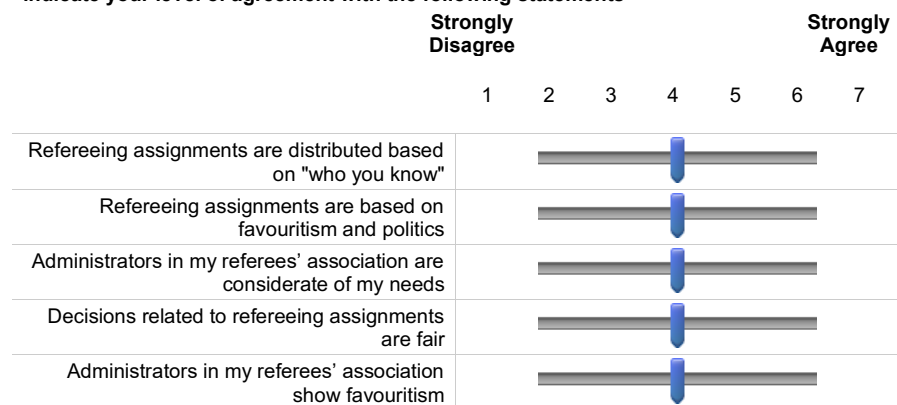
I **continue** to be a rugby referee because...

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I work in a friendly environment								
Of the flexibility to choose when I am involved								
The feelings are similar to playing								
I'm more physically suited to refereeing than playing								

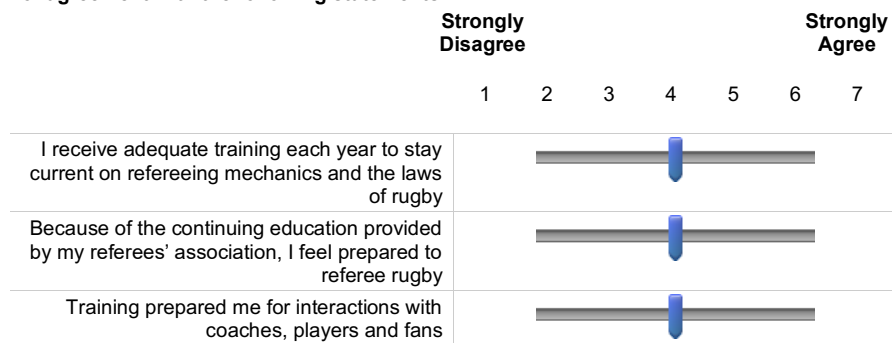
Thinking about referee abuse, use the sliders to indicate your level of agreement with the following statements



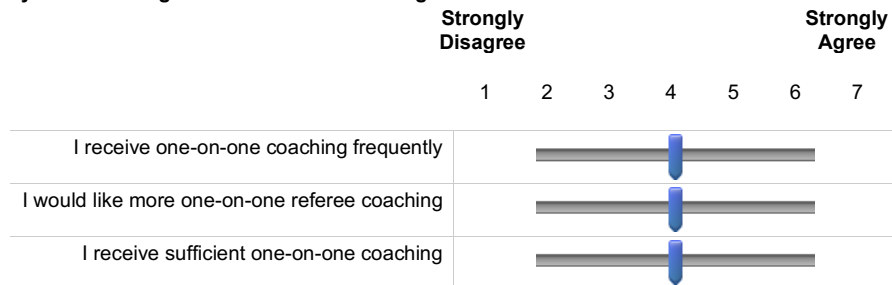
Thinking about the administrator(s) in your referees' association, use the sliders to indicate your level of agreement with the following statements



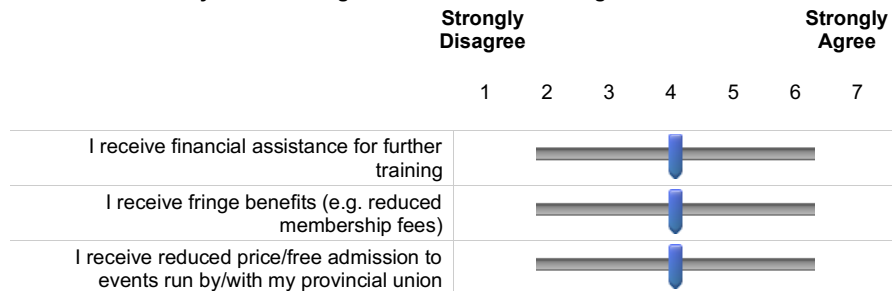
Thinking about **education** you receive as a referee, use the sliders to indicate your level of agreement with the following statements



Thinking about **one-on-one coaching** you receive as a referee, use the sliders to indicate your level of agreement with the following statements



Thinking about **incentives** you may receive from your referees' association, use the sliders to indicate your level of agreement with the following statements



Do you receive payment for refereeing?

- ☐ Yes
- ☐ No

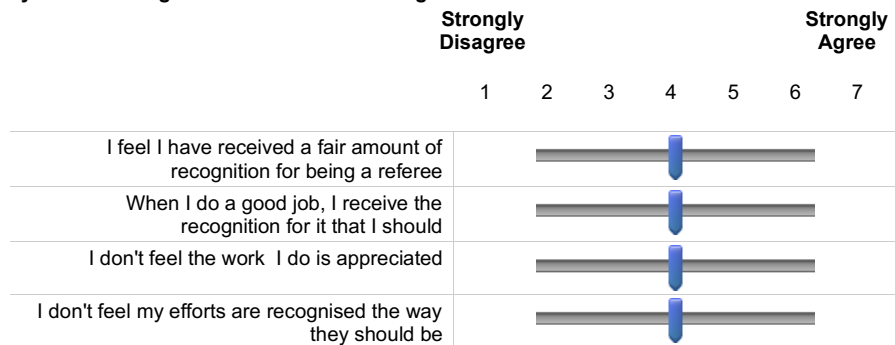
Thinking about the payment you receive as a referee, to what extent do you agree with the following statements

	Strongly Disagree						Strongly Agree
My main motivation for refereeing is financial reward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pay was an important factor in my decision to start refereeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refereeing is a good source of supplementary income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Money is the primary reason I referee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

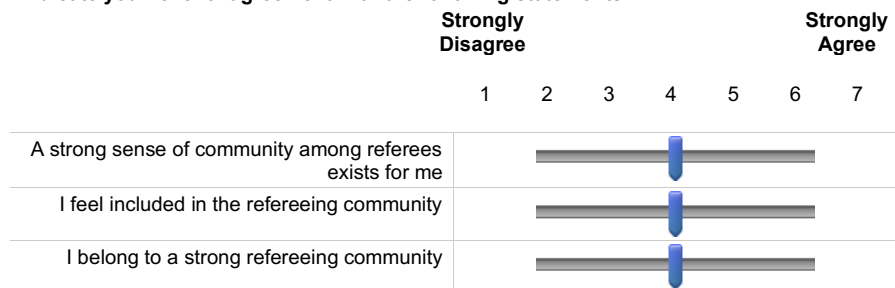
IF you were to receive payment for refereeing rugby, to what extent do you agree with the following statements

	Strongly Disagree						Strongly Agree
I would be more motivated to referee if I received a financial reward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The lack of pay was not an important factor in my decision to start refereeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I was financially rewarded, refereeing would be a good source of supplementary income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even if I was financially rewarded, money would not be the primary reason I referee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

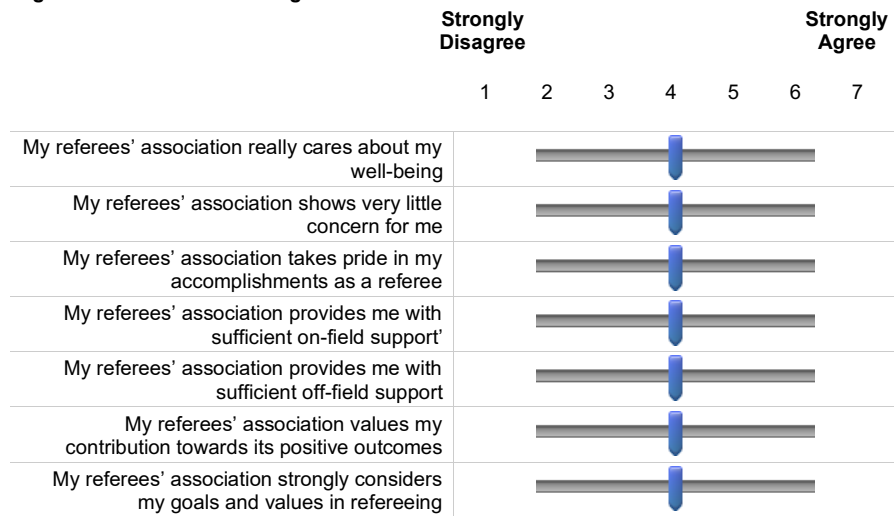
Thinking about the recognition you may receive as a referee, use the sliders to indicate your level of agreement with the following statements



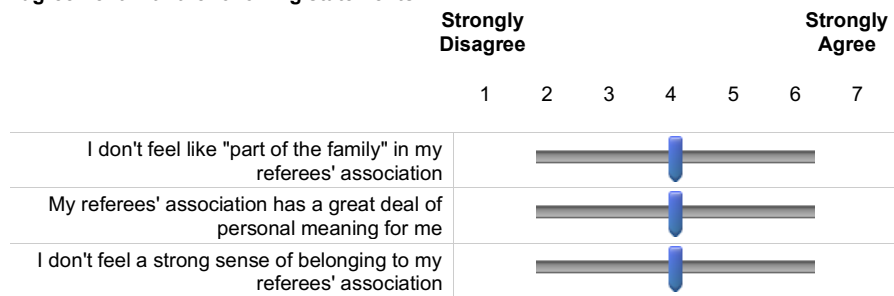
Thinking about the refereeing community in your referees' association, use the sliders to indicate your level of agreement with the following statements





Thinking about your rugby referees' association, use the sliders to indicate your level of agreement with the following statements





Thinking about your rugby referees' association, use the sliders to indicate your level of agreement with the following statements






Thinking about your rugby referees association, use the sliders to indicate your level of agreement with the following statements

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
One of the major reasons I continue to referee at my referees' association is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.									
I was taught to believe in the value of remaining loyal to one organisation.									

Thinking about your rugby referees' association, use the sliders to indicate your level of agreement with the following statements

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
Right now, staying with my referees' association is a matter of necessity as much as desire.									
If I had not already put so much of myself into this referees' association, I might consider quitting									

Thinking about your commitment to rugby refereeing, use the sliders to indicate your level of agreement with the following statements

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
Rugby refereeing is important to my self-image									
I am proud to be a rugby referee									
I am enthusiastic about rugby refereeing									

Thinking about your commitment to rugby refereeing, use the sliders to indicate your level of agreement with the following statements

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I believe people who have been trained as a rugby referee have a responsibility to remain a rugby referee								
I feel a responsibility to rugby refereeing to continue in it								
I am a rugby referee because of a sense of loyalty to it								

Thinking about your commitment to rugby refereeing, use the sliders to indicate your level of agreement with the following statements

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I have put too much into rugby refereeing to consider stopping								
There are no pressures to stop me being a rugby referee								

Looking forward to next season, use the sliders to indicate your level of agreement with the following statements

	Strongly Disagree	1	2	3	4	5	6	Strongly Agree
I intend to continue refereeing rugby past the end of this season.								
I expect to referee rugby past the end of this season								
I want to referee rugby past the end of this season								

Appendix D - Interview Protocol



Auckland University of Technology Ethics Committee (AUTEC)

TE WĀNANGA ARONUI
O TĀMAKI MAKĀU RAU

Interview Protocol and Question Guidelines

Project Title: Blowing the Whistle: Exploring the experiences of early-career rugby referees in New Zealand

Researcher: Javeed Ali, 021 183 5876, javeed.ali@aut.ac.nz

Doctoral Supervisor: Dr Michael Naylor, mnaylor@aut.ac.nz

Prior to meeting the participant, the primary researcher will advise their primary supervisor that they have arrived at the venue for the interview. Primary researcher introduces himself to the participant. Primary researcher then hands the participant another copy of the information sheet and consent form. The consent form is to be signed prior to the interview commencing.

Semi-Structured Interview questions

	Construct or Theme	Question	Follow Up Prompts
1		Please state your name, age and how long you have been refereeing rugby for	
2	Motivation to begin	How did you get into refereeing rugby?	<ul style="list-style-type: none">- What is the one thing that made you pick up the whistle?- Where did the motivation to referee come from?
3	Motivation to continue	Are you refereeing again this season? Why did you come back this season?	<ul style="list-style-type: none">- If referees were to be remunerated for their time, would this motivate you more or less to return? Why/why not?
4	Org overview	Tell me about your RRA, what does the structure look like?	<ul style="list-style-type: none">- Are there paid staff or volunteers?- How do you find your interactions with them?- Do you find they are considerate of your needs? Can you give examples of this?
5	Perceived Organisational Support	Do you find your RRA supportive? Why/why not?	<ul style="list-style-type: none">- Do you feel like just another referee in your RRA? Why/Why not?- How does your RRA care for you?- How does your RRA recognise their members?- Can you think of a time when you felt really supported by your RRA- Tell me about a time where you felt they could have done more- Why do you think they need to do this?

			<ul style="list-style-type: none"> - if your RRA could improve their support of referees, what would it look like? - How does your RRA deal with complaints of referee abuse? Tell me more...
6	Abuse	What in the rugby environment could be improved to make your refereeing experience better?	<ul style="list-style-type: none"> - What stresses you whilst refereeing? - Is abuse present? Why/why not? - How do you deal with abuse? - In contrast to players, coaches etc. How do you feel you are treated as a referee? Can you give me examples?
7	Organisational Commitment	Why do you keep coming back to your RRA?	<ul style="list-style-type: none"> - Why is it important for you to continue to be part of your RRA? - Do you feel a sense of belonging in your RRA? - What might a sense of belonging look like/feel like to you? - Hypothetically, if there were multiple RRAs in your region, how likely are you to stay at your current RRA? Why? - If you were to leave your current RRA for another, how much do you stand to lose?
8	Role Commitment	What is it about refereeing that keeps you coming back?	<ul style="list-style-type: none"> - How important is refereeing to you? - How does the constant conversations regarding shortage of referees influence your continued commitment? - Having learnt the art of refereeing, do you feel responsible to continue refereeing?
9	Summary	To summarise this interview, has you RRA had a positive or negative influence in your experience as a referee? Can you tell me why?	<ul style="list-style-type: none"> -

Following the interview, the end time will be noted, and the primary supervisor will be advised that the interview has ended.