PERSPECTIVES OF CHANGE MANAGEMENT AND DIMENSIONS OF PERFORMANCE MANAGEMENT CONTRIBUTING TO ACHIEVING SUSTAINED SUCCESS IN HIGH PERFORMANCE SPORTS ORGANISATIONS

by

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Abstract

Background: High performance sports organisations (HPSOs) operate in highly complex environments, with multiple stakeholders demanding performance, entertainment and financial results. The sports industry has evolved to create a professional domain characterised by organisational change and demands for sustained success, which has elevated leadership roles to highly skilled positions. Leaders are responsible for building, supporting and empowering multiple-discipline groups, whilst concurrently managing a plethora of change management (CM) and performance management (PM) dimensions.

Purpose: The purpose of this investigation was to determine the objective markers that define sustained success in HPSOs and understand how leaders undertake CM and PM to that end. By comparing current practice with evidence-based research, the investigation sought to identify the skills leaders require to proficiently develop programs supporting sustained optimal performance.

Methods: Senior leaders of HPSOs were engaged in semi-structured interviews and informal conversations to understand how each managed CM and PM in their own environment. Data was interpreted using thematic analysis and compared to peer reviewed research in order to create an understanding of the current environment.

Results: From a micro perspective of CM, HPSOs demonstrating a punctuated equilibrium model of change, favoured change driven from within the organisation. Those demonstrating an emergent model of change, exhibited a bias towards change led from owners or senior executives. From a meso perspective of CM, successful change was culturally supported and guided by evidence-based systems and processes at each stage of research, planning and implementation.

From a macro perspective of CM, successful initiatives were underpinned by the communication of a shared vision, process, roles and responsibilities and expectations between major stakeholders. Additionally, communication throughout the HPSO minimised organisational resistance. Strategic and operational dimensions of PM demanded a variety of "hard skills", whilst individual management and leadership dimensions required different "soft skills".

Conclusion: Leaders must understand the micro, meso and macro perspectives of CM and demonstrate the "hard" and "soft" skills related to PM dimensions, in order to support HPSOs in achieving sustained success. These attributes must be considered during recruitment, with underdeveloped skills acknowledged by leaders and their organisations, and developed through appropriate training, coaching and mentoring.

Lay Summary

The purpose of this research was to establish the common measurable markers that are characteristic of sustained success in high performance sports organisations, such as professional sports teams or sports governing bodies. In addition, the research aimed to understand how the leaders of these organisations manage change and performance. By comparing current practice with the latest available research, the research sought to identify the skills that leaders in these organisations need to use, when developing programs that support ongoing optimal performance.

There is currently little research that explores change management or performance management in high performance sports organisations. The findings of this thesis aim to contribute greater understanding in these areas, which will help guide practice and improve leadership training in these organisations.

Preface

This thesis is original work by the author, Oliver Finlay, who is responsible for the research concepts, methods and designs. All data collection, in the form of semi-structured interviews, was performed independently. All projects were facilitated by Dr. Darren E.R. Warburton, who provided the necessary encouragement and counsel to the author, whilst concurrently granting the autonomy that permits true discovery and learning in the pursuit of creative ideas. The author's committee, Dr. Jack Taunton and Dr. Angus Mugford provided valued support and guidance throughout the investigations, whilst further subject-specific advice was offered as required by Dr. Daniel Parnell, Dr. Wayne Rawcliffe, Dr. Alex Scott and Dr. Shannon Bredin.

Chapter 4 Oliver Finlay was responsible for writing the complete manuscript and conducting the systematic review. Dr. Angus Mugford acted as a second reviewer during the systematic review process. Dr. Shannon Bredin provided methodological guidance on conducting systematic reviews and Dr. Alex Scott provided advice on preparing the manuscript for future peer review submission.

Chapter 5 & 6 Research to investigate how change management is currently undertaken in high performance sports organisations, incorporated the use of semi-structured interviews, recorded via secure online voice over internet protocol software (VOIP). These were conducted by Oliver Finlay.

The University of British Columbia's Behavioural Research Ethics Board (BREB) provided approval for the research project entitled "Investigating the Change Management Process in High Performance Sports Organisations Related to Performance Management". The identification number for this investigation is H18-00519.

Oliver Finlay was responsible for developing the research concept, methodological approach, in addition to collecting, transcribing and conducting the thematic analysis of the data.

Chapter 7 Research to investigate how change management and performance management is currently undertaken in high performance sports organisations, incorporated the use of semi-structured interviews, recorded via secure online voice over internet protocol software (VOIP) and notes taken from informal in-person meetings.

The University of British Columbia's Behavioural Research Ethics Board (BREB) provided approval for the research project entitled "Investigating the management and effects of change in high performance sports organisations demonstrating sustained success". The identification number for this investigation is H19-03374.

Oliver Finlay was responsible for developing the research concept, methodological approach, in addition to collecting, transcribing and conducting the thematic analysis of the data.

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List of Abbreviations

AC	Assistant commissioner
(A)DPD	(Assistant) director of player development
(A)GM	(Assistant) general manager
(A)PD	(Assistant) performance director
BREB	Behavioural Research Ethics Board
CEO	Chief operating officer
CIC	Community interest company
COO	Chief operating officer
CSR	Corporate social responsibility
DBDev	Director of business development
DMS	Director of medical services
DPR	Director of performance rehabilitation
EPL	English Premier League
ESG	Environmental social governance
HAT	Head athletic trainer
HMP	Head of mental performance
HPSO	High performance sports organisation
HPT	Head physiotherapist
HSC	Head of strength and conditioning
IP	Intellectual property
KPI	Key performance indicator
MD	Managing director

MLB	Major League Baseball
MLS	Major League Soccer
MMA	Mixed Martial Arts
MSMSD	Multiple discipline science and medical services department
NASCAR	National Association for Stock Car Auto Racing
NBA	National Basketball Association
NCAA	National Collegiate Athletics Association
NFL	National Football League
NHL	National Hockey League
S&C	Strength and conditioning
SPL	Scottish Premier League
SPT	Senior physiotherapist
TSI	Total societal impact
TSR	Total shareholder return
UFC	Ultimate Fighting Championship
VMOST	Vision, mission, objectives, strategy, tactics
VOIP	Voice over internet protocol
XFL	X-treme Football League

Glossary

High Performance Sports Organisation

Those organisations operating at the "top end of sport development, encapsulating any athlete or team that competes at an international or national level", thus demonstrating their expertise, whilst operating in a "fast paced, highly dynamic environment" (Sotiriadou & De Bosscher, 2018). This definition includes "Olympic and non-Olympic sports, professional sport and team sports…in addition to emerging sports (e.g. lifestyle sports emerging as mainstream sports, like surfing)" (Molan et al., 2019; Sotiriadou & De Bosscher, 2018)

Macro Perspectives Of Change Management

Focus on the organisational ecology and takes into consideration the structure of the company, the organisational inertia, the legal implications, the political landscape and the affects the change process has on the fitness, competitiveness and mortality of the organisation

Meso Perspectives Of Change Management

Focus on the organisational context of the company and takes into consideration the organisational identity, the institutional processes, the values of the organisation and the overall expectations

Micro Perspectives Of Change Management

Focus on the psychological impact organisational change has on the people affected by the initiative and takes into consideration individual perceptions, coping strategies and the stress imparted on the individuals exposed to the process

Multiple-Discipline Science & Medical Services Department

Defined as those departments providing sports science and medical services, in support of the physical, physiological and psychological. performance, health and well-being of athletes and coaches in high performance sports organisations

Performance Management   The continuing process of identifying, measuring and developing the performance of teams and individuals, in addition to aligning performance with the strategic goals of the organisation

Acknowledgements

Finally, I would like to articulate my appreciation for the support provided by my parents, friends, mentors, coaches and colleagues within the sports industry, along the way. This work is a reflection of the community that I am blessed to be surrounded by and I look forward to continuing my voyage of personal and professional discovery enriched by each one of you in the future.

Chapter 1: Introduction

1.1 Executive Summary

1.1.1 High Performance Sport

As with any industry, sport has evolved from its foundational origins. From an embryonic phase, which was heavily influenced by the ancient Greek and Roman civilisations, sport's development has now advanced to a post-commercialisation stage. In the current state, financial forces influence the sports to such an extent, so as to have become intrinsically linked to the success of the participating athletes and organisations, creating an environment where a vast array of stakeholders have developed a symbiotic dependency (Wilson & Piekarz, 2015).

High performance sport, as a defined entity, is a relatively recent sector of the sports industry, originating in the 1950s as governments began to invest in the development of athletes and teams, in order to achieve diplomatic objectives during the Cold War (Houlihan, 2013). This precipitated a move from early stratification, where governing bodies had been established, to one of professionalisation, where the top performers began to earn money for participating in the sports in which they were successful. Early iterations of the high-performance model, focused on elite athletes, or those athletes identified as having elite potential, training with a coach under the supervision or direction of a national sports governing body (Sotiriadou & De Bosscher, 2018). This model evolved in the post-professionalisation era of the 1980s, as some organisations in Europe and Australasia began to expand the model from simply coaching, to incorporating a wide array of support services.

These included science, medical, therapy, psychology, lifestyle and other services, provided by a complex collection of professionals which, eventually took the form of multiple-discipline science and medical services departments (MSMSDs) (J. Smith & Smolianov, 2016).

Consequently, the high performance sports organisations (HPSOs) of today can be defined as those organisations that operate at the "top end of sport development and encapsulate any athlete or team that competes at an international or national level", thus demonstrating their expertise, whilst operating in a "fast paced, highly dynamic environment" (Sotiriadou & De Bosscher, 2018). This definition includes "Olympic and non-Olympic sports, professional sport and team sports…in addition to emerging sports (e.g. lifestyle sports emerging as mainstream sports, like surfing)" (Molan et al., 2019; Sotiriadou & De Bosscher, 2018).

1.1.2 Forces Governing High Performance Sports Organisations

Sports arrival in the post-commercialisation phase, has introduced novel tensions into the management of HPSOs, arguably the most significant of which is a dramatic escalation in player wages, which has placed increasing demands organisations to achieve increased revenues, in order to remain sustainable. In 2019, the 350 teams that populate 18 leagues, across 13 countries, in 8 major global sports, paid $22.6 billion in wages, which represented a rise from $15.75 billion in 2013 (Sporting Intelligence, 2013, 2019). As the wage to revenue ratio of 70% is considered to be a benchmark for organisational sustainability in European professional soccer leagues (Deloitte, 2019), this threshold has implications on all aspects of team operations, as teams seek to finance, retain and protect their most significant assets.

Consequently, HPSOs must carefully consider all aspects of their operations which contribute to revenue generation, in order to meet a wage to revenue ratio that allows them to survive and thrive. This is particularly relevant, given that teams' player wage spends have been shown to directly correlate to overall league position (Carmichael et al., 2011).

Operating in highly complex and idiosyncratic environments, where multiple stakeholders demand results related to performance, entertainment and financial profit, the traditional organisational inertia that can restrain the execution of change initiatives in corporate business environments, is often not such a constraint for HPSOs. Instead, the volatile nature of the industry usually promotes a fast pace of change (Reid et al., 2004; C R D Wagstaff et al., 2015).

1.1.3 The Relevance of Change Management and Performance Management in High Performance Sport

Subsequently, change and innovation have become defining aspects of performance, as each organisation seeks competitive advantages in the quest for attaining sustained success in relation to performance and financial profits, achieved both inside and outside the arena of play. Elite sport has thus evolved into a professional domain characterised by organisational change and, fuelled by the demands for sustained success, HPSOs face unique contextual challenges.

Consequently, HPSOs are now seeking leaders, whose programmes can support sustained optimal performance, in order to attain the exponential rewards and prestige associated with on-field success (Cruickshank & Collins, 2012b). The industry demand for immediate and sustained performance-enhancing change has elevated these roles to highly skilled positions.

Candidates are responsible for building, supporting and empowering large multiple-discipline groups, renowned for their often complicated inter-professional relationships, whilst concurrently managing a wide-ranging web of change management and performance management dimensions (Reid et al., 2004; C R D Wagstaff et al., 2015).

1.1.4 Defining Success in High Performance Sport

In the formative phases of sport, success was easily defined by the results that teams and athletes achieved when participating in competitions. However, in this post-commercialisation era of sport, competition success is rarely achieved without effective functionality of the resource-hungry support systems required to identify, nurture, prepare and maintain the athletes to a level comparable to that of one's competition (J. Smith & Smolianov, 2016). As such, the sporting performances of an HPSO are intrinsically linked to the availability and organisation of its resources and are thus related to the performance of the myriad operations that serve to provide them (Carmichael et al., 2011).

Consequently, it is necessary for HPSO's to recognise the various verticals that must be developed, measured and managed, in order to contribute to the overall success of the organisation's sporting operation (Brand Finance, 2019; Deloitte, 2019; Sporting Intelligence, 2019).

1.1.5 Identifying the Characteristics of Change and Performance Management that Contribute to Achieving Sustained Success in High Performance Sport

Change and innovation are deemed defining aspects of HPSOs. However, as investment in the sports industry increases, the implications of undertaking change initiatives, which are inherently proven to be risky pursuits, must be carefully considered. Most change initiatives fail to achieve their goals (Ashkenas, 2013), whilst concurrently producing high opportunity and process costs, which can seem to outweigh the benefits of the change itself (Jacobs et al., 2013).

Accordingly, given the vast array of stakeholders that are invested in the performance of each HPSO (Brand Finance, 2019), the impact that any change can have on each of them must be considered at all levels, be that individually, institutionally or environmentally (Jacobs et al., 2013; Vakola, 2013).

There is a considerable lack of evidence to guide how the senior leaders and change leaders involved in HPSOs should plan and execute change initiatives or manage the performance dimensions impacted. Consequently, employee turnover in all departments of HPSOs has become a firmly established reflex to results that fail to meet expectations, that are often lacking in comprehension and clarity, as well as being poorly communicated from the outset (Cruickshank & Collins, 2012a).

Effective performance management is similarly integral to HPSOs achieving success. Described as the "continuing process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals" of an organisation (Aguinis, 2013), research into performance management is more limited in sport than the corporate setting. Whilst early research focused on measuring the performance of individuals within organisations, there is a current recognition that the understanding of performance management must holistically consider the interaction of the individual, operational and strategic levels within the same entity (DeNisi & Murphy, 2017).

However, to ensure that HPSOs are adequately positioned to explore the competitive advantages which contribute to achieving sustained success in each specific context, it is important to first understand the demands of the leaders tasked with managing such organisations and the departments within them (Robinson & Minikin, 2011). Once the strategic, operational, individual and leadership aspects of performance management, have been identified, it is then possible to create the skill profiles required for the recruitment and training of those required to execute them (Molan et al., 2019).

1.2 Aims and Objectives

This thesis intends to address some of the knowledge gaps identified, relating to how success is measured in HPSOs, in addition to how change and performance management dimensions are undertaken in these environments.

In doing so, the intention is to provide a greater understanding of how current systems and processes can positively or negatively impact HPSOs' quests to achieve sustained success. Further, by identifying evidence-informed revisions that could enhance current practice in these areas, practical recommendations can be made to support HPSOs and those operating in leadership roles within them.

1.2.1 Aim: To Explore the Operational Verticals that Contribute to Sustained Success in HPSOs

Objectives: i) To identify the key verticals that HPSOs measure and manage that contribute to achieving sustained success ii) To identify some key metrics that are used to provide objective markers of success in these verticals iii) To provide applied, practical recommendations for chief executive officers (CEOs), chief operations officers (COOs), performance directors (PDs) and HPSOs

1.2.2 Aim: To Investigate Change Initiatives that Relate to Key External Stakeholders of HPSOs

Objectives: i) To identify a timely change initiative that is being considered or undertaken by HPSOs ii) To evaluate the relevance of such a change initiative towards achieving sustained success iii) To evaluate the factors that must be considered prior to implementation and how they might affect the stakeholders iv) To provide applied, practical recommendations for chief executive officers (CEOs), chief operations officers (COOs), performance directors (PDs) and HPSOs

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1.2.4 Aim: To Investigate Processes of Organisational Change Management that Occur in HPSOs that Compete in Professional Sports in North America

Objectives: i) To identify how general managers (GMs) or sporting directors identify, research and strategise change initiatives ii) To explore the process of change in relation to planning, challenges of implementation and integration, and barriers to success iii) To establish how change is audited and evaluated iv) To provide applied, practical recommendations for GMs, sporting directors and HPSOs

1.2.5 Aim: To Investigate Processes of Organisational Change Management that Occur in HPSOs that Compete in Professional Sports Around the World

Objectives: i) To identify how general managers (GMs) or sporting directors identify, research and strategise change initiatives ii) To explore the process of change in relation to planning, challenges of implementation and integration, and barriers to success iii) To establish how change is audited and evaluated iv) To provide applied, practical recommendations for GMs, sporting directors and HPSOs

1.2.6 Aim: To Create a Practical Guide on How to Manage Change and Performance Dimensions for Leaders in HPSOs

Objectives: i) To assimilate peer reviewed evidence, current industry practice and personal experience to provide applied, practical recommendations for CEOs, COOs, PDs, GMs, sporting directors and HPSOs

Chapter 2: Identifying the Verticals and Metrics That Contribute to Sustained Success in High Performance Sports Organisations

2.1 Introduction

For an organisation to achieve long term and sustainable development, it must consider economic, environmental, cultural and social factors (Waśkowski, 2015). Beyond development, defining and measuring success in HPSOs is a complex exercise, exacerbated by the fact that such institutions do not exist in isolation from their matrix of stakeholders, each presenting with different needs (Bof, 2006).

2.2 Stakeholders

Stakeholder theory acknowledges that there are many entities interested in how, and with what result, a business functions (Friedman & Miles, 2002). Stakeholders are people or groups, organisations, institutions or commercial entities, which have a legitimate interest in the activities of an enterprise in pursuit of its goals. These may also influence the enterprise or be influenced by the enterprise (Clarkson, 1995). In the sports setting, stakeholder attitudes and actions can influence the success of the team, although the nature of involvement and expectations will vary for each stakeholder. Consequently, a sports organisation has to apply various strategies that address each specific collaboration.

In professional soccer, twelve potential stakeholders have been identified as contributing to a two-way relationship with a team's brand (Brand Finance, 2019). Internal stakeholders are identified as: players; directors, technical staff; all other employees.

External stakeholders are specified as: debt providers; investors; sponsorship partners; merchandising channels; broadcast and media; existing customers; potential customers; and fans.

However, other stakeholders should also be considered, including competitors, international and national sports governing bodies (e.g. FIFA, International Olympic Committee [IOC], UK Sport), unions (e.g. Professional Footballers' Association, National Football League Players' Association), league administrators (e.g. English Premier League [EPL], National Basketball Association [NBA]), government authorities (e.g. environmental agencies, tax agencies, local councils, police forces, transport providers), service providers (e.g. private security companies, catering providers), geographical neighbours and lobby groups (e.g. environmental protection groups, community action groups).

2.3 Identification of Verticals That Contribute to Success in HPSOs

The relationship between the outcome of participation in the arena of play, the financial health and the interactions with the communities that the organisation impacts, ensure that defining success demands the consideration of factors beyond the results of the team, despite this being the most visible representation of the organization (Bof, 2006). In his introduction to the Annual Report 2017-2018, FC Barcelona President, Josep Maria Bartomeu i Floreta highlights the multi-faceted forms of success that define his organization, summarising that "This is the Barça that is improving society through the positive impact of sport, social commitment, research, innovation and training. For members of our Club, what counts is that our teams win championships, and what also counts is everything that sets us apart from the rest, and defines our identity" (FC Barcelona, 2018).

The report (FC Barcelona, 2018) itself gives a thorough performance review of:

1) Professional sports teams - sports team performances including soccer, handball and basketball; becoming a sporting reference point; building relationships with sports institutions;

2) Knowledge - youth and post-graduate education, social awareness, Barcelona Innovation Hub, conferences, service training programmes, life skill workshops, technology, research development and dissemination;

3) Social - member participation in the club, fan clubs, amateur sports, social impact foundation projects and building relationships with non-sports institutions, alumni;

4) Barça Brand - brand development, and positioning, fan zones, museum, revenue diversification and revenue internationalisation, public relations, international and diplomatic relations, media;

5) Global Business - sponsors, merchandising, global youth academies, tours, exhibition games;

6) Heritage - development of extended urban area around stadium (Espai Barça), innovation hub;

7) Support - supporting department activity e.g. Human Resources, Operations, Travel, Planning Strategy & Innovation, Systems & Technology, Access & Accreditations, Compliance and Legal;

8) Economic Report - debt management, payroll management, operational efficiency, innovation, digitisation, accounting and governance.

Each sector's performance, totalling in excess of 400 actions, is measured in reference to the strategic projects and related strategic targets, which together comprise an extension to the strategic plan commissioned in 2015.

The plan was compiled to provide a six year roadmap, overseeing the mandate put in place in line with the vision of "transforming the world through sporting excellence" and the mission, "to become the most admired, loved and global sports institution in the world" (FC Barcelona, 2015). It is apparent, therefore, that on-field success is critical but just one element defined in the lines of strategy identified in this document. Comprehensive reports are outlining similar scopes of involvement from other HPSOs such as Real Madrid, Borussia Dortmund, Juventus and City Football Group (Borussia Dortmund, 2019; City Football Group, 2019; Juventus, 2019b; Real Madrid, 2019a, 2019b).

Whilst cases such as FC Barcelona, Real Madrid, Juventus, Borussia Dortmund and City Football Group demonstrate an expansive list of criteria against which success may be measured, some elements are only appropriate given the sporting status, global reach of the brand and financial power of these organisations (Borussia Dortmund, 2019; City Football Group, 2019; FC Barcelona, 2019; Juventus, 2019b; Real Madrid, 2019b). However, the overall performance areas identified in the annual reports of such organisations are a useful framework upon which to deconstruct the assessment of success in all HPSOs (Hatum & Silvestri, 2015).

2.4 Key Performance Indicators and Objective Performance Metrics

In order to objectively ascertain whether individual criteria are being met and to what extent, key performance indicators (KPIs) must be established using valid and reliable measures, indicators and metrics. A meaningful performance indicator is a quantification that provides objective evidence of the degree to which a performance result is occurring over time (Barr, 2017). To this extent, KPIs will evolve as people, departments and organisations develop or change focus.

KPIs should be related to the measurable goals that have been set, as opposed to looking for things to measure in order to compile a battery of KPIs. Additionally, each stakeholder should be engaged in setting relevant KPIs to which their contribution will be held accountable, otherwise they are likely to be deemed irrelevant and ignored. Whilst setting meaningful KPIs can be challenging, especially if feasible data is hard to identify, Hubbard states, "if something is better, then it must be observable or detectable. And if it's observable or detectable, it can be counted in some way. And if it's counted, it's measurable" (Hubbard, 2014).

2.5 Sports Teams

At a first-team level, the nature of sport and in particular soccer, is that the results on the pitch will always be the paramount concern for all involved at the club (Ward et al., 2013). Meanwhile, in American sports franchises operating in competitions such as the National Football League (NFL), where there are no development or youth teams, these results are likely to hold even greater relevance throughout the organisation. Consequently, league tables, play-off appearances, promotions, relegations and championships are easy reference points for success.

Within game analytics can be used to define success through key player performance metrics for each position, which can be aligned with the philosophy, style and systems that a team chooses to adopt.

For example, in soccer, these may include goals scored, goals conceded, total shot attempts on goal (on and off target), ratio of the sum of goals scored/assists/shots on target:total shots, total shots on target, total assists, total crosses made, total crosses completed, total passes completed, total dribbles, total dribbles completed, total tackles made, total tackles won, total blocks/clearances/interceptions, yellow cards received, red cards received, total fouls committed, total shots on goal by opposition team, ratio of goals conceded:goalkeeper saves, total saves made by goalkeeper (Carmichael et al., 2011).

Each sport and specific league will be able to identify unique combinations of factors that are statistically related to success in their own individual environment (Mora, 2018; Watson et al., 2017). For example, a recent study in Chinese Super League soccer reported significant physical performance differences between groups, as identified for sprinting (top-ranked group vs. upper-middle-ranked group) and total distance covered without possession (upper and upper-middle-ranked groups and lower-ranked group).

In relation to technical performance, teams in the top-ranked group exhibited a significantly greater amount of possession in their opponent's half, number of entry passes in the final third of the field and the penalty area, and 50–50 challenges than lower-ranked teams, whilst time of possession increased the probability of a win compared with a draw (Yang et al., 2018). However, given the sport is at a different stage of evolution in this specific league compared to other soccer leagues, for example the EPL, using the same markers to ascertain a successful outcome in other leagues might not be relevant.

Within season analytics can be used to define success through key team performance metrics such as points won, points won during current season as a percentage share of total points won by all clubs in current season/previous season/as a percentage of maximum points available, ratio of points won at home to points won away from home (Carmichael et al., 2011).

Using results as an isolated outcome measure, however, ignores other critical components of the vision, mission, strategic plan and financial resources of each individual organization, that have been shown to contribute to sporting success. For example, in the EPL, research demonstrates that at club level, player salary spend is the most influential variable on winning a league match, with the statistical likelihood of the home team winning positively related to the home team's increased expenditure on wages (Carmichael et al., 2011). An increase in the club wage bill relative to the EPL average is related to the increased likelihood of winning a match by 47%, yet the effect is diminished when the top five teams compete against each other (Cox, 2016). Subsequently, in leagues where competitive balance is not promoted through regulating financial structures, teams that are unable to increase expenditure relative to competing teams may identify achievement of promotion, avoidance of relegation, play-off appearances, cup rounds negotiated, number of live television broadcast appearances or qualification for continental competition as objective markers of success. In addition, teams that invest in their youth academies will use criteria such as player development markers, the number of players from the academy that make first team appearances in their own club, or revenue/trades earned from selling "home-grown" players and the minutes they go on to accrue at a professional level, to define success away from the first team level (Crane, 2017).

Within leagues where competitive balance is carefully regulated, team revenue has a reduced impact. However, different challenges to sustained performance are presented in the form of salary caps, salary floors, distribution of new talent through weighted draft systems and a variety of player contract commitments. Thus, team fortunes follow a more cyclical pattern as strong teams age, decline and younger teams mature and develop into championship contenders (Sheinin, 2018).

Given that this model is dominant in North American sports leagues, such as the NBA, NFL, Major League Baseball (MLB), Major League Soccer (MLS) and National Hockey League (NHL), where a team's elite league status in guaranteed through the exclusive franchise model, it might actually be within an organisation's strategy to perform poorly for a number of seasons. This strategy enables a team to accrue high draft picks and build for future success, once a nucleus of talented young players has been assembled. The controversial strategic tactic of "tanking", where a team actually seeks to finish bottom of the standings, as opposed to languishing mid-table in the hope of scoring higher draft picks, has formed the foundation for success for teams like the 2016 Chicago Cubs and the 2017 Houston Astros in MLB (Sheinin, 2018). In these instances, therefore, success may actually be defined by achieving negative performance metrics and instead the accumulation of high draft picks and salary cap space, as opposed to achieving positive performance metrics in the arena of play.

Whilst this strategic approach can erode a fan base and reduce sponsorship revenue, at least in the short term, embracing the decision and being honest with stakeholders can minimise the impact.

The Philadelphia 76ers (NBA) built a brand around the approach and christened it "The Process", famously selling t-shirts emblazoned with "Trust The Process" on the front, in order to engage stakeholders in the journey (Rappaport, 2017). In early 2018, the New York Rangers (NHL) adopted the same approach and openly divulged their strategy to their stakeholders (Loennecker, 2019).

2.6 Knowledge

Given the degree of expertise employed by many HPSOs and the value of the intellectual property they create, the drive to disseminate knowledge and facilitate knowledge sharing is central to some strategies. In 2016, UFC founded the Performance Institute at its headquarters in Las Vegas. Central to the Institute's mission is the aim of "sharing best practices for performance optimization with athletes and coaches around the world" (UFC, 2018).

In recognising the early evolutionary stage that mixed martial arts is at as a sport, there is an understanding within the organisation, that the performance team have to take a comprehensive approach to asking the right questions and collecting the right data, in order to understand what it takes to prepare and compete at the top level in the sport. The UFC Performance Institute has identified its critical role in becoming a "conduit for sharing information…that serves to elevate global knowledge and educate on 'best practices' for the sport of MMA" (UFC, 2018). This form of free dissemination is greatly advantageous for UFC, with the organisation contracting all fighters that compete in its competitions.

Subsequently, by enhancing the knowledge of training methods, the expectation is that the competitive standard and longevity of the athletes will increase. Such improvements should consequently enhance the competition and, in turn, benefit the parent organization.

Another HPSO that has positioned itself as a key player in identifying and disseminating sport-specific practices, is FC Barcelona. The club's fabled academy, La Masia, has a long-founded philosophy of using sport to develop young people, some of whom will go on to represent one of the club's professional sports teams.

The organisation has invested significant resources into developing their youth development programmes. La Masia sees "the education of the player in all of its dynamic complexity, within the context of a culture of learning, involvement and self-criticism geared towards performance" and believes that "the academic and human education of each individual is just as, if not more, important as the sports education". Subsequently, the club is proactive in holding educational events to share this philosophy and system of education. Indeed, the value of educating its community is further upheld, by providing life and career skills programmes for service providers that interact with the club, as well as for the families of the young players that attend La Masia (FC Barcelona, 2018).

Beyond youth education, FC Barcelona has created BIHUB, a platform that brings together all of the organisation's projects in research, innovation and training, with the aspiration of becoming the "world's primary centre of knowledge and sports innovation", through promoting an open culture of collaboration (FC Barcelona, 2015).

BIHUB has become a new revenue stream but links back to the organisation's strategic plan in identifying that the challenge to continue winning, drives the need to keep up with new developments in the areas of sport collectives, sports performance, sports technology and analysis, health and well-being, fan engagement and big data, smart facilities and social innovation (FC Barcelona, 2018). To this end, the club is building an ecosystem for sports clubs and organisations, sponsors, universities and research centres, start-ups and consolidated companies, investors, sport users, professionals, fans and users. It does this by: supporting scientific research projects, promoting innovation focused on joint development of products and services, providing on-line training for professional development and regulated training with masters and postgraduate qualifications and by organising conferences and congresses (FC Barcelona, 2019).

This approach is mirrored by La Liga rivals, Real Madrid (Real Madrid, 2019a), despite the risk inherent with this model, being that in so freely facilitating the sharing of cutting edge information and practices, the organisation gives away a degree of competitive advantage to its sporting adversaries. However, by providing a market for the educational vehicles, revenue is created that can be reinvested into developing further innovation. Additionally, once inside the system, talent can migrate from department to department, with FC Barcelona citing examples of athletes retraining through internal education courses upon cessation of their playing career and staying within the Club. As such the organisation benefits by constantly being ahead of the competition and retaining employees that are already invested in the vision, values and philosophy of the brand (FC Barcelona, 2019).

Another model for driving revenue and success through knowledge creation is showcased by City Football Group (CFG), the parent company that owns Manchester City FC. The group also has ownership stakes in Melbourne City FC (Australia), New York City FC (USA), Yokohama F Marinos (Japan), Girona (Spain), Sichuan Jiuniu (China) and Club Atlético Torque (Uruguay) (City Football Group, 2019). Leveraging their internal professional knowledge in science, medicine, marketing, coaching and scouting, CFG shares findings from research and development projects throughout its network but also sells systems to other HPSOs in the industry to generate revenue. The organisation has also collaborated with universities and sports governing bodies to further enhance its knowledge creation and dissemination network (City Football Group, 2018).

A similar model has been developed by Red Bull, who also own football teams such as Red Bull Salzburg (Austria), RB Leipzig (Germany), New York Red Bulls (USA) and Red Bull Brasil (Brazil). Whilst the teams in Austria and Germany have met considerable resistance through fans' concerns with an erosion of heritage, amongst other gripes, there are definitely many benefits that such a system brings to the table (Norval, 2018). Red Bull have developed a unified internal culture which ensures its teams share a general vision, footballing philosophy and values system. These promote knowledge sharing and advancing players through internal talent development pathways. To this end, Red Bull teams' default is to generally reject big-money, quick-fix transfers, which contribute to avoiding sky-rocketing ticket prices, and instead they prioritise investing time and money into youth development. Their teams are set up to play fast and entertaining football, which has become a hallmark for the entire brand (Norval, 2018).

In such HPSOs, knowledge creation, in the form of research, as well as systems and process development, and its subsequent dissemination throughout identified internal and external end users, are key criteria for evaluation. As such, success in this area can be defined by data outlining the number of research papers published, revenue generated by education courses or system/technology sales and attendances on courses, training programmes or conferences and costs saved by having centralised means of developing systems, processes and people (City Football Group, 2018, 2019).

2.7 Social

The most easily referenced marker of an HPSO's social impact is the number of members and fan clubs it has registered at any one time (Borussia Dortmund, 2019; City Football Group, 2019; FC Barcelona, 2019; Juventus, 2019b; Real Madrid, 2019b). Data points are also easy to collect in relation to the number of people engaged through community outreach programmes and the amount of resources contributed to corporate social responsibility programmes (FC Barcelona, 2019; Juventus, 2019a). However, this corporate social responsibility model views shareholder value and corporate health as unrelated to societal impact, which places such programmes at risk during times of financial struggle (Beal et al., 2017).

Outside of sport, consensus is building in the corporate community, that businesses must consider the impact they have on society in addition to delivering total shareholder return (TSR). Total societal impact (TSI) is a collection of measures and assessments that capture the economic, social and environmental impact of a company's products, services, operations, core capabilities and activities.

Subsequently, there is a recognition that adding this TSI perspective to strategy, drives organisations to leverage their core business to contribute to society. Subsequently, this pursuit of social impact is actually integral to the strategy and value creation of the company, thus positively impacting the TSR over the long term (Eccles, 2017).

Management consultants, Boston Consulting Group, demonstrated a significant positive relationship between a company's financial performance and non-financial performance, including environmental, social and governance issues, relevant to its sector and strategy (Beal et al., 2017). Whilst the research did not include HPSOs, the group examined the relationship between financial and non-financial performance in retail and business banking, biopharmaceuticals, oil and gas and consumer packaged goods sectors. In each sector, the top performers for combined performance had higher valuation multiples than median performers and achieved higher margins (Beal et al., 2017).

Given the increasing pressure that a range of stakeholders are placing on organisations to play a more active role in addressing social and environmental issues, this approach can actually explore opportunities between the HPSO and its employees, sponsors, investors and fans. Employees are encouraging their employers to have a greater sense of purpose, whilst seeking to become involved in the delivery of societal impact efforts (Eccles, 2017). Sponsors are aware that the perceived fit between themselves, the HPSO and team identification significantly influences their brand equity constructs (Tsordia et al., 2018).

Investors are increasingly focusing on companies' social and environmental performance, as their view on what constitutes wealth changes. In 2018, socially responsible investing assets in the five major markets (Europe, USA, Japan, Canada and Australasia) accounted for $30.7 trillion, which represented a 34% increase in two years (Global Sustainable Investment Alliance, 2018) and more than one quarter of total managed assets globally, an increase on the $18 trillion figure reported 2014 (Beal et al., 2017). Fans are increasingly attuned to information related to the social and environmental impact of the brands to which they are loyal, and it would be complacent to suggest that sporting interests are exempt from this sentiment (Beal et al., 2017).

In other industries, strategic plans that incorporate TSI initiatives have been shown to open up new markets, drive innovation, reduce cost and risk in supply chains, strengthen brands and support premium pricing, gain advantages in attracting and retaining talent and become integral parts of the economic and social fabric. TSI-focused companies have also been shown to grow and thrive over the long term, thus supporting sports organisations to achieve sustained success, whilst staying relevant in the face of evolving societal trends (Reeves & Püschel, 2015). Subsequently, there is a case to suggest that attributing metrics to objectives related to the delivery of environmental, social and governance (ESG) standards, and subsequently auditing them, should form part of HPSOs' overall measurements of success. Whilst ESG measures are not designed to measure a company's TSI, this data is currently the best way to quantify a company's TSI by providing an insight into the largest impact of an organisation - the intrinsic societal value created by its core products or services (Connaker & Madsbjerg, 2019).

Some business structures, such as the B Corporation framework, incorporate these standards into their legislation and as such help to align TSI with strategic planning (B Lab, 2018; Clarkson, 1995; Grimes et al., 2018).

2.8 Brand

Research conducted to evaluate the impact of brand awareness on the financial success of sports teams in the Bundesliga, concluded that the significance of engaging fans and potential fans was critical in achieving economic success (Bauer et al., 2005). Furthermore, in the USA, merchandise revenues in the NBA, MLB and NHL, were found to be significantly influenced, in a positive manner, by both success from an athletic perspective as well as by positive brand equity (Gladden & Milne, 1999). Similar findings were reported by FutureBrand (2001), when comparing the on-field performance, brand equity and merchandise revenue between an MLB, an NBA and two NFL teams.

It could be argued that the Bundesliga is one of the best leagues in world sport at engaging their fanbase, given that all 36 professional clubs of the Bundesliga and Bundesliga 2 were historically structured as members' associations and non-profit organizations owned by their members (Norval, 2018). Despite a structural review in response to concerns that German clubs were struggling to compete with teams from other leagues, a 51% majority share must still remain in control of the members' associations, although creative organisational structures have been employed to circumvent this model and establish a stranglehold on power within certain HPSOs (Norval, 2018; Ward et al., 2013).

In spite of the local focus, clubs such as Borussia Dortmund still invest significant resources into increasing brand awareness in Asia and North America, in addition to courting the domestic market (Borussia Dortmund, 2019). This strategy may actually be a direct response to being fan-owned, which prevents access to the magnitude of financial resources enjoyed by HPSOs operating under the single ownership model, such as Manchester City FC or Paris St Germain (Dietl & Franck, 2007; Franck, 2011). Additionally, broadcast revenues received by the Bundesliga are much lower in comparison to the EPL, Spain's La Liga and Italy's Serie A (Deloitte, 2019). Consequently, it is critical that Bundesliga clubs attract significant revenue through leveraging their brand through fan interactions, media services, merchandising and sponsorship, in order to compete at the intercontinental level, despite these shortfalls in revenue through broadcasting and owner investment. In comparison to the other main European soccer leagues, the Bundesliga's sponsorship and commercial performance is second only to the EPL (Deloitte, 2019).

Meanwhile, another team proactively following a brand globalisation strategy, AS Roma, have received industry plaudits after their English Twitter account achieved an engagement percentage of 290% in June 2018 and later 316% in October 2018. These figures were the highest worldwide interaction percentages of any other soccer team (Rogers, 2018). This medium is being seen by industry experts as a critical way of expanding the club's international fan base, "Roma, for instance, know they have limited scope in increasing their fanbase in Italy – the vast majority of Italian football fans will already have a club.

It's a different matter abroad, where football fans may have a passing interest in Serie A without supporting a team. Good social content can help them gravitate to a club and potentially even convert into fully-fledged supporters" (Shah, 2018).

Relying on individual components of brand awareness which provide the most easily obtained data points, such as social media metrics, introduces bias. Subsequently, there is a concern that such biases could erroneously influence board and ownership decisions in relation to staff retention or recruitment, in line with fan sentiment. Social media is characterised by immediacy, emotion and reactivity which runs counter to the objectivity, reflection and considered strategic thinking that should inform decision making in sport. An example of this occurred in 2018, when a training ground argument between the then head coach of Manchester United FC, Jose Mourinho, and star player, Paul Pogba, was captured on film and subsequently went viral on social media outlets. Data analytics demonstrated that the fans' opinion and support of Mourinho's work had fallen by 38% as a direct result of the event, whilst Pogba's support had risen significantly in comparison. Commentary articles were suggesting that in the face of such public opinion, combined with recent poor results, the Manchester United board could ignore neither the fans' displeasure, nor the perceived damage to the global brand of the club and could be persuaded to act decisively to terminate Mourinho's contract (Shah, 2018).

In fact, less than three months following the incident, Mourinho was relieved of his managerial duties at the football club, with media sources referring to the fractious relationship with Pogba as a contributory factor in the Club's decision to act despite the decision costing an estimated £18 million in contractual compensations (S. Stone, 2018).

Other models have explored a broader range of organisation-wide opportunities that can be associated with executing a strategy aimed at developing the reach of a team's brand (Villarejo-Ramos & Martín-Velicia, 2007). These have been aimed at identifying and quantifying the cyclical interaction of brand equity metrics (quality, awareness, loyalty, image) with organisational benefits (broadcast exposure, merchandising, sponsorship, environment, ticket sales), perception, team antecedents (coaching staff, star player, perceived success), company antecedents (reputation, tradition, atmosphere) and market antecedents (coverage, location, competence, fans). This approach allows each component in the cycle to be measured and an objective marker of impact and success evaluated. This model mitigates the threat of HPSOs relying on isolated measures of brand awareness, such as social media statistics, which focus on one major stakeholder (e.g. the fans) over all others (e.g. sponsors, investors, employees) and would, therefore, contribute positively to the overall evaluation of success in brand development for HPSOs (Villarejo-Ramos & Martín-Velicia, 2007).

In order to assess success in brand performance, Brand Finance calculates values of the brands in its research using the Royalty Relief approach - a brand valuation method compliant with industry standards (International Standardization Organization, 2016) set in ISO10668 (Brand Finance, 2019). This method incorporates the Brand Strength Index (calculated using brand investment, brand equity and brand performance metrics, which include stadium capacity, squad size and value, social media presence, on pitch performance, fan satisfaction, fair-play rating, stadium utilisation and revenue), the Brand Royalty Rate (calculated applying Brand Strength Index to an appropriate sector in the royalty range) and Brand Revenues (royalty rate applied to forecast revenues) to define overall Brand Value (Brand Finance, 2018).

2.9 Global Business

The issue of global expansion is often a contentious issue for many sports fans. Whilst attracting investors and engaging in lucrative markets around the world can significantly impact the spending power of HPSOs, the excessive commodification and marketisation of sports teams, particularly in the upper echelons of professional sport, have been accused of alienating the traditional fan base that such organisations were built upon and founded to serve (J. Williams & Hopkins, 2011).

In recent years, pressure from broadcast corporations, foreign owners, league administration and shareholders has seen a significant increase in sport teams playing exhibition or in the case of the NFL, NBA and MLB, even competitive league games thousands of miles from home. Now the most popular sports league in China, the NBA has formed partnerships with some of the country's biggest tech companies, including a reported $500 million deal with Tencent, which allows WeChat to carry its games and highlights. Subsequently, teams such as the Philadelphia 76ers and the Dallas Mavericks have played pre-season games in Shanghai and Shenzhen, whilst in 2019 the Charlotte Hornets and Milwaukee Bucks played one of their in-season contests in Paris, France (Saiidi, 2018). Consequently, the 76ers have hired Mandarin-speaking staff to help distribute media content and see this area of business as a competitive advantage to be explored in enhancing the value of the organisation (Saiidi, 2018).

Meanwhile, the NFL has been playing regular season games in London since 2007, despite the fact that the costs to the league of transporting and accommodating personnel, promoting the games and hiring venues have seen each fixture record a loss on the balance sheet.

The league believes that the investment will soon pay handsome dividends, however, as efforts made in building the fan base have achieved high percentages of repeat attendance and sustained levels of interest. It is expected that this will result in a significant return on investment, in the form of increasing media rights and sponsorship values in the coming years, which will justify persisting with the strategy (Panja, 2016).

In recent years, pre-season tours have become platforms for European soccer teams to raise significant revenue, as they build relationships with markets in Asia and North America. "There are millions to be made in appearance money, sponsors are granted special access that is more difficult to accommodate in the season proper, and brand building with long distance or new fans is championed" (Lawrence, 2017). The value of these tours to China, specifically, have been identified by Brand Finance, who report that 57% of all Chinese fans bought club merchandise and 41% purchased a shirt. The spin-off benefit for sponsors is that 42% of Chinese fans bought brands that sponsor their favourite club (Brand Finance, 2018).

The risks of high-profile pre-season strategies, however, have been well publicised. Costs to promoters and host stakeholders are high and, whilst sponsors are sold on the premise that it is an opportunity to reach new markets, there is a risk that given coaches are often reluctant to play their best players and ticket prices are so high, the matches can easily attract bad publicity. Tickets for FC Barcelona's game versus Real Madrid in Miami in the summer of 2017 cost nearly nine times the cost of admission to the UEFA Champions League Final, which subsequently prompted outrage in the media (Menary, 2017).

One summer later, Jose Mourinho's public declaration that the quality of Manchester United's pre-season encounter with rivals Liverpool, watched by over 100,000 American fans in Michigan, was below par and "not something he would pay to see", prompted similar negative sentiment (A. Jones, 2018). Subsequently, commentators have been prompted to suggest that unless the fixtures are part of a coherent strategy on the part of the sponsors, there is a risk that the events can feel a bit irrelevant and a cynical way of exploiting overseas fans (Menary, 2017).

Such global exposure has, however, formed the foundation upon which teams have developed portfolios of international commercial partners and created networks of football academies that, not only support talent identification in far flung corners of the world, but also create important revenue streams. At the top end, FC Barcelona have 17 global sponsors, 27 regional sponsors with a total of 44 sponsors spread over 19 countries of the world. Meanwhile, in pursuit of its aim to remain a "global benchmark in sponsorship", Real Madrid launched up to 1,740 items of content in collaboration with its global partners, which generated almost 3 billion impressions world-wide in the 2018-2019 season (Real Madrid, 2019a). In the same competitive window, City Football Group reported that over 193 million cumulative television viewers tuned in to watch Manchester City play their Premier League fixtures (City Football Group, 2019).

Aside from corporate partnerships, several HPSOs seek to engage directly with their global communities of fans. Barça Academy gives over 45,000 children across 45 permanent schools, in 22 countries and four continents, the opportunity to learn the club's style of play and values (FC Barcelona, 2018).

Real Madrid's Foundation covers a similar footprint, with 311 football and basketball schools spread over 77 countries on five continents, serving 44,600 children (Real Madrid, 2019a) and Juventus also reach five continents with their network of 110 international camps and academies (Juventus, 2019a). In addition, the HPSO's in-house marketing and events departments have become significant sources of revenue, with Barcelona hosting over 400 international events both at home and around the world, including conferences, VIP parties, graduation ceremonies, football tournaments, Legends games, Fan Zones and trade fairs (FC Barcelona, 2018).

Given the overlap between brand development and global business, the impact that these business operations have on the overall value of an organisation and the respective markers of success can be evaluated using similar metrics to the ones outlined by Brand Finance (2018), whilst also accounting for direct revenue amounts achieved originating from overseas sources.

2.10 Heritage

The Australian Sports Commission has outlined the key contribution that sporting heritage plays in the success of HPSOs and argues that history has a vital presence in sport, providing benchmarks for future results. They state that if sports organisations don't retain records, neither can growth be adequately measured, nor success demonstrated (Blood & May, 2018).

By investing in their heritage, HPSOs can benefit from a strong historical identity by:

i) fostering pride, loyalty and inclusion, which assists retention of current members and attraction of new members;

ii) providing a valuable marketing asset to attract support, funding and sponsorship;

iii) inspiring current and future athletes to emulate and exceed past success;

iv) reinforcing the contribution current endeavours have in creating an organisation's ongoing story;

v) identifying heritage assets and organisational IP that may be commercially explored.

The growing number of sports museums, and their popularity as tourist attractions in their own right, is an indication that the heritage dimension of sport is recognised as an important source of revenue for HPSOs. The Olympic Museum in Lausanne is one of Switzerland's most visited museums, whilst Old Trafford (Manchester United's stadium, which houses its own museum) attracts over 250,000 visitors each year and can be compared with some of English Heritage's top visitor attractions (Pinson, 2017). Such facilities provide outlets and engagement opportunities that satisfy public and corporate interests, enhancing, not only the brand value of an organisation, but in some instances, its internal culture by successfully incorporating their rich sporting history in the formation of current values (Wood, 2005). HPSOs that openly celebrate their past triumphs and disasters, whilst successfully fostering ties to their team's current story include the New Zealand All Blacks, Manchester United FC, Real Madrid, Juventus, Detroit Red Wings and the Boston Red Sox.

Other HPSOs, such as Real Madrid, Manchester City and FC Barcelona have joint ventured with city councils, educational institutions, governing bodies and corporate partners to take their heritage investments still further.

Strategies include undertaking gentrification of blighted urban areas in vicinity of their stadia and providing extensive resources for local communities, which include university campus buildings, sports facilities, parks and residential housing (City Football Group, 2019; FC Barcelona, 2018; Real Madrid, 2019a).

Measuring success related to heritage projects can include sphere of influence metrics, footfall data, related membership retention and attraction statistics, asset appreciation, generation of related revenue, in addition to internal employee satisfaction and engagement measures (FC Barcelona, 2018).

2.11 Support

Just as with any corporate entity, HPSOs have an array of professions which support their sporting operation. Whilst smaller organisations may have individuals performing a specific professional role, or even outsource certain aspects of operational support, larger organisations will have dedicated departments for sports science and medical services, human resources, planning strategy and innovation, information systems & technology, facility operations, travel, security, compliance and legal (Borussia Dortmund, 2019; Juventus, 2019b; Real Madrid, 2019a). Those teams operating under an umbrella structure that incorporates a number of sister teams, may have a central hub that manages centralised operations such as accounting, corporate partnerships, scouting and information technology (City Football Group, 2019).

In order to identify and construct KPIs that match each individual program's specific goals and philosophies with effective performance analysis, it is necessary for each department to understand the foundational methodology of data organisation for both objective and subjective metrics. Forming KPIs is an essential aspect of the scientific analysis process and should be done both on an individual and group basis. It is necessary to remain cognisant that the KPIs of one particular department, team, or comparative department between teams, may be totally different than the KPIs from another, as context dictates. However, each set must be configured to optimally serve each institution based upon their needs (Hauck, 2018). In doing so, it is important for departments that may have overlapping jurisdictions, to be cognisant of areas of potential conflict and collaboratively establish clear priorities, so as to prevent ambiguity around intervention that leads to conflict, a lack of accountability and an underlying toxicity.

Each department will structure their respective key performance indicators, aligned to aims and objectives consistent with the strategic plan laid out by the overall organisation. These objectives may be linked to performance measures in other departments, such as coaching and talent identification, or may be more unique to the department according to the nature of the roles and responsibilities of the staff involved (Dijkstra et al., 2014).

2.12 Economic

Sports organisations receive revenue from a variety of sources, including media broadcast contracts, sponsorships, merchandise sales, ticket sales, facility rental, events, intellectual property and in certain leagues where players' contracts are traded for financial recompense, player transfers. In leagues where teams are independent entities, for example the EPL, La Liga, the Bundesliga and Serie A, broadcast revenue is usually shared amongst league members. In leagues where teams are franchised entities issued by the league, for example the NFL, the NBA and MLB, sponsorship contracts, merchandising and ticket sales may also be shared between the franchises (Ejiochi, 2014).

Additionally, sport governing body organisations will receive federal funding and grant awards from both public and private purses, to support aspects of their high-performance programmes. For example, Cycling Canada's biggest stakeholder is Own the Podium (OTP), which receives much of its support from the federal government, which contributes $62 million in enhanced excellence funding each year through Sport Canada, to support both winter and summer sports. Provincial governments also collaborate with OTP to support projects that align with provincial and national Olympic and Paralympic programs in the areas of sports science and sport medicine, coaching, training and competition. Independent and predominantly privately funded, the Canadian Olympic and Paralympic Committees, deliver resources to support elite athletes and will also support the governing bodies to fund small projects that influence the high-performance programs (Cycling Canada Cyclisme, 2016).

As OTP focusses on leading the development of Canadian sports to achieve sustainable and improved podium performances at the Olympic and Paralympic Games, it prioritises investment strategies by making funding recommendations using an evidenced based, expert driven, targeted and collaborative approach. Consequently, in order to secure the greatest amount of funding from OTP, Cycling Canada concentrates the majority of its efforts in developing the high-performance aspect of the sport. Therefore, for sports governing bodies, the amount of income awarded through grants and government funding can be considered a measure of success (Cycling Canada Cyclisme, 2013).

Organisational expenditure may include costs related to sports operations (player and coaching payroll, contract incentives, signing fees), non-playing or coaching pay roll, operations, travel, taxes, facility acquisition/maintenance/refurbishment, debt financing, hardware leasing, legal and food/beverage. Some leagues stipulate playing salary caps (NFL, NBA, MLS, NHL), playing salary floors (NBA, NFL) or financial regulations that consider sports operation spend in relation to debt, recent break even, equity and employee benefits (FIFA registered leagues) (Carmichael et al., 2011).

The indicators that are routinely used when evaluating financial performance are sales, operating results (earnings before interest, taxes, depreciation and amortisation [EBITDA]), results from operating activities (earnings before interest and taxes [EBIT]), tax liabilities, gross and net debt, equity, net income for the year, cash (including cash equivalents) flows from operating activities, operating working capital, financial working capital (including free cash flow), revenue and net profit/loss for the year.

The economic health of an organisation must consider the results year on year, alongside credit risks, market risks and liquidity risks, to give a fundamental barometer of success in these areas (Borussia Dortmund, 2019; Real Madrid, 2019a).

2.13 Conclusion

The breadth of operations observed in HPSOs can be surprisingly broad, with indicators of performance being evaluated in many areas. Consequently, it is neither appropriate nor possible to perceive organisational success based solely upon the in-competition results of the most easily recognised representational team or athlete (Borussia Dortmund, 2019; City Football Group, 2019; FC Barcelona, 2019; Juventus, 2019b; Real Madrid, 2019b). Therefore, in acknowledging the relationship between the various interactive components that contribute to the unique structure of many HPSOs, a thorough assessment and evaluation must be conducted on a case by case basis in order to determine the objective markers of success for each.

The intricate, elaborate and entangled nature of the interactions between each component and its respective KPI within the ecosystem, must be acknowledged in the context of high-performance sport, which is an environment that demonstrates continuous volatility, uncertainty, complexity and ambiguity (Millar et al., 2018). To achieve sustained success in this landscape demands ongoing measurement, assessment and evaluation of each variable, with subsequent change and innovations being managed concurrently. Consequently, leaders need to have a clear understanding of change management and how this relates to each stakeholder, both within and out with the organisation (Cruickshank & Collins, 2012a).

Chapter 3: Changing Practice in High Performance Sports Organisations in Relation to External Stakeholders

3.1 Introduction

The extensive array of external stakeholders that interact with HPSOs and retain a vested interest in how they engage with their specific ecosystems, include sponsorship partners, broadcast and media, existing customers, potential customers, fans, sports governing bodies, professional unions, league administrators, government authorities, service providers, geographical neighbours and lobby groups (Brand Finance, 2019; Clarkson, 1995; Friedman & Miles, 2002). It is important to explore how these entities may influence the evolution of an HPSO and shape the changes such organisations undertake, in order to achieve sustained success in the various verticals identified in the previous chapter.

The expansive nature of operations observed in HPSOs requires the leaders within the organisation to continually consider the relationship between the various interactive components of each vertical, in an environment that exhibits continuous volatility, uncertainty, complexity and ambiguity (Millar et al., 2018). Such management involves the ongoing measurement, assessment and evaluation of each variable, with subsequent change and innovations being managed concurrently, incorporating a cognisance as to how these relate to such stakeholders (Cruickshank & Collins, 2012a).

3.2 Measuring the Impact of HPSOs in Their Communities

Many external stakeholders, including fans, existing customers, potential customers, service providers, sponsorship partners and geographical neighbours form the core of the local, national and global communities with whom HPSOs must develop a symbiotic interdependency. Subsequently, understanding how such organisations can develop strong positive relationships with their communities, is critical for those within front office positions when seeking to achieve sustained success (Sheth & Babiak, 2010).

Many professional sports organisations invest in corporate social responsibility schemes (CSR), aimed at giving back resources to groups, individuals and causes needing support within their communities. Such organisations capitalise on several factors unique to sport, that positively affect the nature and scope of CSR efforts, including mass media distribution, communication reach, youth appeal, positive health associations, social interaction, sustainability awareness, financial investment, stakeholder relations and a passionate fanbase (Babiak & Wolfe, 2009; A. C. T. Smith & Westerbeek, 2007). CSR schemes such as Football in the Community, launched in England in 1986, can take the form of community sports programs, education programs, charity partnerships and fund raising activities, initiated to positively influence social issues including health, social inclusion, social regeneration and access to sport (Cope & Parnell, 2015; Krustrup & Parnell, 2019; Parnell et al., 2013).

3.3 CSR vs Total Societal Impact

The literature suggests, however, that whilst traditional CSR models in sport have both altruistic and strategic motives in employing philanthropy-related practices to ameliorate or enhance their brand image (Gan, 2006), organisations often view shareholder value and corporate health as unrelated to societal impact. This places such programmes at risk during times of financial struggle (Beal et al., 2017).

Consequently, this disconnect might contribute to the inadequate guidance for which some programs have previously received criticism and also explain why evaluation processes have not been adequately monitored and modified to sufficiently address the complexity and outcomes of the interventions (Tacon, 2007; Widdop et al., 2018).

Outside of sport, consensus is building in the corporate community, that businesses must consider the impact they have on society, in addition to delivering total shareholder return (TSR). Total societal impact (TSI) is the term used to describe a collection of measures and assessments that capture the economic, social and environmental impact of a company's products, services, operations, core capabilities and activities (Beal et al., 2017). There is a recognition that in including this TSI perspective in strategic planning, organisations are driven to leverage their core business to contribute to society. Subsequently, this pursuit of social impact is actually integral to the strategy and value creation of the company, thus positively impacting the TSR over the long term in a way that CSR does not (Dahlstrom & Goland, 2018; Eccles, 2017).

3.4 The Benefits of Incorporating TSI into Corporate Strategy

Management consultants, Boston Consulting Group (BCG), demonstrated a significant positive relationship between a company's financial performance and non-financial performance, including environmental, social and governance issues, relevant to its sector and strategy (Beal et al., 2017). Whilst the research did not include sports organisations, the group examined the relationship between financial and non-financial performance in retail and business banking, oil and gas, biopharmaceuticals, and consumer packaged goods. In each sector, the top-ranking businesses for combined performance, had higher valuation multiples than median performers and achieved higher margins (Beal et al., 2017). In industries outside of sport, strategic plans that incorporate TSI initiatives have been shown to open up new markets, drive innovation, reduce cost and risk in supply chains, strengthen brands and support premium pricing, gain advantages in attracting and retaining talent and become an integral part of the economic and social fabric (Mennel & Wong, 2015; Winograd & Hais, 2014; Young et al., 2019).

TSI-focused companies have also been shown to grow and thrive over the long term, and thus, it could be suggested that similar approaches adopted by HPSOs, might contribute to teams achieving sustained success and staying relevant in the face of evolving societal trends (Dahlstrom & Goland, 2018; Reeves & Püschel, 2015). Furthermore, given the increasing pressure that stakeholders are placing on HPSOs to play a more active role in addressing social and environmental issues, incorporating TSI strategies could explore opportunities between a team and its employees, fans, sponsors and investors (Beal et al., 2017; Dahlstrom & Goland, 2018; Eccles, 2017; Tsordia et al., 2018)

3.5 Business Frameworks That Incorporate TSI into Company Strategy

As advantages of incorporating TSI into overall business development strategies are more widely recognised, demand has turned to third party organisations or governments to award recognition for companies investing in TSI, whilst providing advice, guidance and support for those working to improve their performance in this area (Dahlstrom & Goland, 2018). Dependant on the geographical and regulatory context, there are several options for these social business "hybrids" to adopt, in order to use primarily commercial means to create value for society, while developing operations that are financially sustainable and leverage commercial contracts, to enable business growth (Santos et al., 2015).

3.5.1 B Corporation

B Corporation certification is a private certification issued by the non-profit organisation, B Lab, to for-profit companies around the world. Candidates must achieve a minimum score on an online social and environmental performance assessment and integrate commitments to stakeholders into aspects of corporate governance (B Lab, 2018).

The certification identifies and celebrates companies that achieve, or are making sufficient positive steps to achieve, exceptional positive social and environmental impact. Individually, certified B Corporations meet the highest standards of verified performance, public transparency, and legal accountability (Livingston, 2012). As such, B Corporations understand the importance of building true, sustainable value whilst genuinely engaging with their community and managing their environmental impact, with the aim of improving the lives of all their stakeholders.

This is not about sacrificing profit but instead, by harnessing the power of business, B

Corporations are redefining success, to use profits and growth as a means to a greater end:

positive impact for employees, communities and the environment (Livingston, 2012).

3.5.2 Benefit Corporation

Whilst the B Corporation accreditation is an international certification, it has no legal status, as it

is issued by a private company. In contrast, the United States has introduced the Benefit

Corporation entity, which is a legal status conferred by state law in 30 states. Like B Corporation

companies, Benefit Corporations are for-profit businesses that meet higher standards of

accountability and transparency, with the aim of using the power of business for the higher

purpose of solving challenging societal problems (Reiser, 2011).

Benefit Corporations are, however, legally required to consider the impact of their decisions on

their workers, customers, community and environment (B Lab, 2018).

Whilst there is a difference between B Corporation and Benefit Corporation status, in the 30 US

states where Benefit Corporation status is awarded, using the Benefit Corporation structure is the

only way to meet the legal requirement for B Corporation certification. Benefit Corporation

statutes have, however, attracted criticism for providing neither suitable guidance nor

enforcement apparatus for midstream decision making, meaning that it is difficult for dual

missions to be held to account over time (Reiser, 2011).

3.5.3 Community Interest Company

In 2005, the British government introduced the Community Interest Company (CIC) designation, which was designed for social enterprises that were seeking to reinvest profits in projects that primarily satisfy social objectives. Whilst they are less stringently regulated than charities, organisations seeking CIC status must be limited companies and are awarded their certificate of incorporation by the CIC regulator (Gov.uk, 2019). However, where this company structure differs from B Corporations and Benefit Corporations, is that CICs must lock all assets and earnings beyond limited investor dividends into the community benefit stream (Gov.uk, 2019; Reiser, 2011), which is likely conflict with the objectives of even the most socially dedicated HPSO.

3.6 Social Business Frameworks for HPSOs

Taking all legislation into consideration, there are several factors that suggest B Corporation status is the most appropriate structure to which HPSOs should aspire, if they are seeking to satisfy TSI objectives. Primarily, teams with global brand growth strategies are more likely to be able to resonate with their international fanbase and commercial partners as a certified B Corporation, given the global recognition that is afforded such status (Dahlstrom & Goland, 2018; Livingston, 2012). Furthermore, the requirement for B Corporations to consider their impact on all stakeholders, ensures that the certification process offers more guidance to teams, when assessing TSI in relation to the wide range of stakeholders affected by HPSOs (Clarkson, 1995). Additionally, B Corporations are not restricted to reinvesting all profits earned into projects designed to address social concerns (Storper, 2015).

Consequently, the designation does not limit the investment that HPSOs are required to make towards developing the other areas of a business that must be managed to achieve sustained success in all areas of operations.

3.7 Social Impact Projects in HPSOs

In practice, there are many HPSOs that are addressing environmental, employee welfare, community engagement, stakeholder selection and governance issues aggressively, however, none have adopted a formal hybrid business model (Belson, 2015; Blaustein, 2017b; City Football Group, 2019; Dumais, 2017; FC Barcelona, 2019; Finlay, 2018; Gumas, 2018; Juventus, 2019a; Moses & Mingey, 2015; Real Madrid, 2019a). It is, however, obvious from reviewing the literature, that the focus for these organisations has been on environmental and community programs for much longer than it has been on employee investment, stakeholder alignment and transparent governance issues. Furthermore, it is difficult to ascertain as to what extent the social impact programs are integrated into the organisation's strategic plans.

3.7.1 Positive Environmental Impact

Many HPSOs have invested significant resource into incorporating design and technological innovation into making their arenas and training centres more reliant on sustainable energy, reducing the energy demand created within them, reducing resource waste or reducing the carbon footprint that is involved with the construction of new facilities (City Football Group, 2019; Real Madrid, 2019a).

Aside from promoting an awareness of the need to care for their environment, these strategies also result in significant reductions in the financial cost of running energy-thirsty facilities and, in some cases, can even create new revenue streams to explore in other areas of the business (City Football Group, 2019; Levis Stadium, 2016). Table 3.1 highlights various initiatives that have been created by HPSOs with the aim of having a positive impact on their environment.

Table 3.1 HPSO initiatives for positive environmental impact

SPORTS ORGANISATION	POSITIVE ENVIRONMENTAL IMPACT
Seattle Seahawks	Promotion of mass transit; waste diversion
New England Patriots	On-site solar; 100% use of clean energy to generate all electricity on game days via the purchase of renewable energy credits; 100% recycled grey water supplied by the stadium's on-site water management system
St Paul Saints	CHS Field built on a contaminated brown field site; reuses rainwater for field irrigation; reused most of a former Gillette warehouse to construct the stadium; uses a water-steam based system for heating & cooling, which are around 35% more efficient than traditional grid supply systems; supplies 12.5% of ballpark's power through a 100kW solar system
Atlanta Falcons & Atlanta United FC	LEED Platinum certified stadium; water efficient fixtures & conservation infrastructure; 1.1 million gallon underground water vault to provide community flood protection, whilst providing water for irrigation & water cooling tower; installed 4,000 solar panels to power either 10 Falcons games or 13 United matches with clean renewable energy; uses LED lighting to reduce energy usage by 60%; encourages fans to take light rail to games, reducing fan car traffic by 25%
Manchester City FC	Absorption chillers & combined heat & power systems export electricity to the grid, thus reducing carbon emissions; air source heat pumps; rainwater harvesting; bore hole water & LED lighting fitted to the training complex; wastewater from ground activities is recycled & reused across the training complex & stadium; rainwater harvested & used in own craft beer
Golden State Warriors	Practice facility powered with solar energy; reduced energy use at the Oracle Arena through an energy management system; rainwater recapture system uses harvested water to feed plants & vegetation surrounding the arena; local vendor collaboration to convert oil from concession stands to bio-diesel; eco-friendly cleaning solution created using water, salt & electricity; compostable cutlery & flatware plus food waste composting in arena restaurants
Land Rover BAR	No single-use plastics; Life Cycle Assessment determines how best to use, reuse, recycle & dispose of materials from design to end-of-life; 100% renewable energy at training base; meat-free Mondays & consumption of only sustainable seafood for team & staff; drafted a sustainability charter for all teams competing in America's Cup
Philadelphia Eagles	Generate 100% of energy from 14 micro wind turbines & 11 fixed solar panels, which produce more than 3MW of power at the stadium; low flow bathroom fixtures; recycling & composting; employee incentives for going green
Brighton & Hove Albion FC	80% of fans travel to home games using public transport; eliminating single use plastics; stadium designed to be hidden from sight from various elevated vantage points throughout the National Park within which it is sited.
Seattle Mariners	Data collection system tracks energy & water use, measures recycling capabilities, captures paper purchasing trends resulting in a significant reduction in natural gas & electricity usage, which saved over $1million between 2006-2009
USTA	Reuses all food grease as biodiesel fuel; recycles used tennis balls
Sacramento Kings	Arena electricity is generated from solar power sourced within 50 miles of the city; arena hangar doors are opened to use a natural cooling phenomenon, controlling building climate efficiently; arena designed to keep nearly 2,000 tons of greenhouse emissions out of the atmosphere
Ohio State University	96.5% of waste diverted from landfill via recycling, composting or repurposing in 2015
Forest Green Rovers	Meat-free menus at club training ground & stadium concession stands; energy-efficient LEDs; roof-mounted solar panels & ground-mounted solar car panel ports

3.7.2 Community Engagement

Many teams have a non-profit charitable organisation, dedicated to supporting projects in their community, either through fundraising, education or providing manpower and expertise (FC Barcelona, 2019; Gumas, 2018; Real Madrid, 2019a). In the USA alone, more than 100 charities and foundations being run by owners, teams and leagues in all major sports had contributed almost $163 million to charitable causes by 2015 (Belson, 2015; Moses & Mingey, 2015). Table 3.2 highlights various community engagement programmes and initiatives that have been established by HPSOs.

Table 3.2 HPSO community engagement programmes

SPORTS ORGANISATION	COMMUNITY ENGAGEMENT PROGRAMMES
Land Rover BAR	Fund an education centre in Bermuda, welcoming over 10,000 visitors a during America's Cup & open to local public, featuring classrooms & interactive exhibits on innovation & technology, ocean health, invasive species, new plastics economy, renewable energy
Arizona Diamondbacks	Quarterly community service event; work with local youth baseball programs & charities/non-profits to address homelessness, healthcare & child wellbeing
Sacramento Kings	Polled 20,000 city residents & held focus groups to ascertain that the new arena should represent a model of sustainability, before working to achieve the first LEED Platinum certification of a sports arena; shared organisational vision to drive meaningful change in the community, including working to curb climate change & promote renewable energy; mission to promote best sustainability practices whilst improving fan experience
FC Barcelona	Conferences to disseminate knowledge in sport; Masia Solidarity Program creates social awareness of the sports people in their Academy through personal experience & creating emotional wellbeing for the beneficiaries of over 60 organisations the program interacted with in 2017-2018; taxi-driver training days; BIHUB conducts research, supports start-ups, creates learning opportunities & disseminates knowledge to the sports community
Manchester United FC	Manchester United Foundation offers a range of educational projects for young people in their local area, in areas related to football, business, life-skills, employability, music, health & wellbeing
Boston Red Sox	The Red Sox Foundation gave over $52 million to community projects between 2002-2012; RBI program promotes good decision-making through development of good nutrition, leadership, respect for others, non-violent conflict resolution & an overall commitment to one's potential & the community; Red Sox Scholars provides mentoring, enrichment activities & scholarships to high school children from diverse backgrounds, who have shown perseverance & good citizenship
Chicago Cubs	Cubs Scholars Program awards college scholarships to inner-city high school students every year; Cubs Care grants are awarded to local organisations that have been in existence for at least 3 years; Diamond Project encourages members of the community to become active as coaches, mentors, caretakers & allies
Jacksonville Jaguars	Honor Rows program is the NFL's largest youth incentive program promotes academic achievement, behavioural improvement, school-wide challenges & community service; Straight Talk program aims to reduce teen pregnancy & sexually transmitted disease; Teen Talk program promotes healthy choices, healthy relationships & build a strategy for a healthy future
Chicago White Sox	Created the White Sox Volunteer Corps to help local non-profit groups in 2009 & now includes 4,000 volunteers who have helped at 195 events in Chicago, donating an estimated $780,000 of labour
Tampa Bay Lightning	Give $10M/year to local charities & set up the Lightning Community Hero program, enabling fans to nominate hundreds of local good Samaritans, three times a year; a committee of local community leaders then selects a hero for each of the team's home games & the hero decides which group or groups should receive a $50,000 donation from the team

3.7.3 Social Impact

One aspect of TSI less well addressed by HPSOs, is that of aligning stakeholder practices with a team's social objectives (Sheth & Babiak, 2010). One key stakeholder relationship that has significant ability to reinforce or undermine a genuine intention to positively affect social change is that of commercial partners or sponsors (Blaustein, 2017a).

There are high profile cases of "greenwashing", where poor commercial partner selection has negatively affected the positive societal impact some sports organisations have achieved in other areas of their operations. A high-profile case in the National Collegiate Athletics Association (NCAA) football system drew attention to this issue, when 10 college athletics programs, including the universities of Minnesota and Wisconsin, entered into a marketing partnership with Koch Industries in 2015. Between 1997 and 2015, Koch Industries had contributed $67 million to groups denying climate change, was the third largest holder of Canadian tar sands oil leases (among the dirtiest oils on the planet) and was leading the fight against the expansion of the solar power industry in Florida through its 'Americans For Prosperity' political action group (Blaustein, 2017c). The message this commercial partnership communicated was inconsistent with the environmentally pro-active sentiments that the universities in Minnesota and Wisconsin were proudly promoting and working hard to champion in their athletics departments at the time.

Lifestyle messaging is another area that has attracted significant attention in the area of sports sponsorships, with concerns voiced around the number of brands promoting gambling, alcohol and junk food in the sporting environment (Lindsay et al., 2013).

A study of commercial partnerships in Australian Rules Football (AFL) audited each of the 18 teams' websites and playing uniforms, classifying sponsors as red (alcohol, gambling and junk food/beverage sponsors), amber (venues that provided gambling and other services) or green (sponsors promoting healthy lifestyle concepts). All 18 teams were reported as having at least one red sponsor, with 15 clubs sponsored by alcohol companies and 5 clubs featuring red sponsor logos on their playing uniforms. Whilst 12 teams had green sponsors, none were displayed on playing uniforms (Sartori et al., 2018). A similar study investigated the prevalence of gambling companies partnering with soccer teams in England and Scotland and reported a dramatic rise in such relationships since 2005. The authors subsequently recommended that legislators took steps to address the trend based on public health concerns (Bunn et al., 2019).

This research illustrates the challenges of balancing commercial revenue streams with social purpose objectives (Bunn et al., 2019; Lindsay et al., 2013; Sartori et al., 2018). Currently, there are far fewer examples of socially aligned commercial partnerships, in comparison with the numerous cases of HPSOs contributing environmental and community initiatives that provide positive impact on their communities.

Partnerships with charitable causes and non-profit organisations are increasing, however. American spending on "cause sponsorship" was expected to reach $2.06 billion in 2017, up from $2 billion in 2016 (Dumais, 2017).

Given that the projected sport sponsorship spend in North America alone through 2015 was around $15 billion, it is apparent that a shift towards commercial partnerships, directed at creating shared value for programmes focused on achieving positive societal impact, would help HPSOs significantly increase their influence in this area (City Football Group, 2018; FC Barcelona, 2018; King, 2019; Moses & Mingey, 2015). Table 3.3 provides examples of HSPOs that have engaged with a commercial partner to provide an initiative with a social impact vision.

Table 3.3 HPSO alignment with commercial partners to create social impact initiatives

SPORTS ORGANISATION	COMMERCIAL PARTNER ALIGNMENT WITH SOCIAL IMPACT VISION
Manchester City FC	Entered into relationship with Eaton & existing partner Nissan, to promote home energy storage units, developed using recycled batteries from Nissan electric vehicles & educate fans on the benefits of such units. Phase 2 might see these units being installed at the stadium.
Land Rover BAR	BAR leverage the power of partnership with sponsors Land Rover, British Telecom, Aberdeen Asset Management & Low Carbon, to adopt sustainability initiatives with the aim of engaging all stakeholders to take positive environmental action
Sport Club Recife	The team partnered with the government to promote a public health initiative with the objective of increasing the number of organ donors in the country; the initiative resulted in 51,000 donor cards & the waiting list for heart transplants down to zero
FC Barcelona	Working with UNICEF since 2006, the partnership has so far brought €19 million in revenue for the charity. Initially displaying the charity logo on the front of their shirts, the team signed a sponsorship deal with a corporate entity in 2011, displacing it; he club now pays UNICEF £1.25 million per year to display the logo on the back of the playing shirt, with funding being put into action in 16,000 schools in developing countries in the form of financial aid, sports training & equipment, access to education, support for orphans & initiatives to limit the spread of AIDS
National Basketball Association	Partnered with sponsor BBVA to promote a financial literacy program for elementary school students, which involved some players making appearances to present educational material

3.7.4 Employee Benefit

An employer's relationship with its employees is a further consideration that must bear scrutiny when organisations are seeking to achieve B Corporation status (B Lab, 2018). Positively impacting the lives of each worker and their family, has significant positive effects for businesses, in relation to reducing employee turnover and attracting quality talent. Sport has historically buffered the high rate of employee turnover, through the reliance on the high level of competition to enter the industry and the eagerness of employees to navigate the high barriers to entry, to justify paying poor wages and demanding long hours. However, HPSOs such as the Arizona Diamondbacks, the Cleveland Cavaliers and the NFL are starting to address working conditions in a positive manner (Belzer, 2015).

A study by Intelligence Group reported that 64% of millennials would rather make $40,000 annually working for a company they love and care about, than $100,000 at a job they find boring or less meaningful (Field, 2015; Winograd & Hais, 2014). Additionally, they are looking for work-life integration, that permits flexible working schedules, in environments that favour collaboration and mentorship (Asghar, 2014). Meanwhile, a Goldman and Sachs study found that millennials, who represent nearly 50% of the global workforce, "have specific needs at work that are dramatically different from previous generations. High among these [is] a desire to align personal and corporate values. To attract and retain this group, we believe that companies need to provide rewards beyond financial gain" (Honeyman & Giadorou Koch, 2015). Such values include a priority to "make the world a better place".

To this end, sports organisations are subsequently striving to innovate in ways to best serve their employees (Finlay, 2018). Table 3.4 illustrates HPSOs that have been recognised for their commitment to creating improved working environments for their employees.

Table 3.4 HPSO employee benefit schemes

SPORTS ORGANISATION	EMPLOYEE BENEFIT SCHEME
Brighton & Hove Albion FC	Employee bonus that reflects on-pitch success, individual performance, department performance, attendance & training uptake; staff loans for travel expenses; Pilates & yoga; gym access; free breakfasts & lunches, with menu compiled by the team dietitian
Arizona Diamondbacks	Employees vote on an "employee of the month", from all departments & that person is included monthly executive meetings to solicit feedback & provide encouragement; monthly 'all-employee' meetings; most valuable partner award
Cleveland Cavaliers	Support for employee promotions within the organization & league; investment of time & resources in employee training
FC Barcelona	Provides life skills classes, such as cooking & nutrition, emotional education, social media & understanding the preoccupations of a young sportsperson, to families of players registered their youth sports academy

3.7.5 Governance

An area that has drawn considerable attention in recent months is that of sports governance. B Corporation certification and legislation demands transparent governance, and this is an area where the sports industry as a whole has been challenged to improve. High profile incidences of corruption scandals in soccer and Olympic sport; athlete abuse cases in gymnastics, cycling, athletics and soccer; reports of discrimination in baseball, soccer and rugby; and doping allegations in athletics have all served to harm individual HPSOs and reduce trust in the specific sports in which they operate (Bloom, 2017; Chappelet, 2018; McPhee & Dowden, 2018; Press Association, 2017).

Whether these specific cases have been the result of inappropriate behaviour by directors; the ongoing use of outdated or inequitable structures; failure to execute sufficient background checks on owners or staff; a lack of suitable measures of accountability over board decisions; or presiding over environments that were unable to provide sufficient safety to athletes and staff, these failings of governance have precipitated the call for improvements to be made at both governing body and independent organisational levels (Parent & Hoye, 2018). Consequently, there has been a significant increase in the compilation of suggested principles and guidelines of governance, in order to counter previous failings (Australian Sport Commission, 2015; Geeraert et al., 2015; IOC, 2016; McPhee & Dowden, 2018; Sport New Zealand, 2018; UK Sport, 2017).

Such documents, including those documented in Table 3.5, have sought to standardise aspects of governance such as: "democratic structure/democracy; accountability; transparency; professionalization; control/supervisory mechanisms; fairness; solidarity/social responsibility; equality; elected presidents; board skills (instead of representation) and term limits; separation of board chair and CEO roles; codes of ethics and conflicts of interest; athlete involvement/representation; stakeholder participation/representation; anti-bribery/corruption codes; equity; respect; autonomy/independence; evaluation; effectiveness; efficiency; planning standards; structure standards; and access and timely disclosure of information" (Chappelet, 2018).

Table 3.5 HPSO governance guidelines

SPORTS ORGANISATION	GOVERNANCE GUIDELINES
UK Sport	A Code for Sports Governance
Sport New Zealand	9 Steps to Effective Governance-Building High Performance Sports Organisations
Australian Sports Commission	Mandatory Sports Governance Principles
International Olympic Committee	IOC Risk & Assurance Governance Structure

3.8 The Advantages and Disadvantages of an HPSO Formally Committing to a Social Impact Framework

Considering numerous HPSOs have already been mentioned as leading the industry in creating examples of positive social and environmental impact (Sheth & Babiak, 2010), it could be argued that there is little, to no benefit for HPSOs in committing to becoming a social impact entity and, indeed, that the process might actually be counterproductive. To this end, it is worth considering the drawbacks that might be associated with achieving B Corporation, Benefit Corporation or CIC status.

Firstly, the B Corporation certification process is comprehensive, time consuming and comes at a cost. It would also be necessary for those teams with shareholders to expand their shareholder reports, to provide enough information to determine if the organisation is achieving its stated purpose (Storper, 2015). However, it is argued that in undertaking the certification process, companies are supported in exploring their moral impact and consequently improving their ethical performance (Livingston, 2012).

Given the actions of the organisations already identified as seeking to positively impact their communities and environments, this is likely to be welcomed, as opposed to feared. In addition, in acknowledging the disparity between the number of sports organisations investing in community and environmental projects and those investing in stakeholder alignment, employee welfare and governance issues, it could be suggested that employing a B Corporation model might provide the necessary guidance and justification for diverting sufficient resources to improving performance in these areas (B Lab, 2018; Grimes et al., 2018; Livingston, 2012).

Whilst such changes may incur an initial outlay of resources, research shows that good practice in these areas is critical for maintaining trust in the individual organisation and overall industry, which has a knock on effect for improving consumer loyalty and brand value (Australian Sport Commission, 2015; B Lab, 2018; IOC, 2016; UK Sport, 2017). In the case of the legally bound Benefit Corporations, shareholders can technically bring charges against the company for not conducting its stated social mission, in a manner similar to directors of traditionally legislated companies being sued for violations of fiduciary duty (Livingston, 2012; Storper, 2015). This is not the case for B Corporations, as the accreditation is not legally bound. Thus, whilst such legal uncertainty might impact Benefit Corporations looking to raise capital from private investment sources, this is not the case for B Corporations. Meanwhile, the growing number of social business hybrids, is likely to contribute to increased clarity in this area (Field, 2015).

The demand for B Corporations to carefully examine the moral and ethical practices of their stakeholders, including sponsors, suppliers and investors could be considered to have potentially restrictive consequences on commercial and operational activities.

The example of Minnesota and Wisconsin universities' commercial partnerships with Koch

Industries, is one that appears particularly poorly aligned, and had either organisation been

legally confined by the statutes of a Benefit Corporation, such an agreement would have

prompted considerable legal ramifications. This would not, however, have been the case if either

had been certified as a B Corporation and in fact, the necessary process of certification would

have flagged this agreement as unethical at the outset, perhaps informing a better decision

making process (Grimes et al., 2018).

Furthermore, research in USA concluded that many owners and executives deemed the donation

of funds to non-profit organisations and the support of social causes as being more important

than their HPSO being economically viable, or making a profit (Sheth & Babiak, 2010). Whilst

this particular study returned a low number of usable questionnaires, which might suggest that

many owners did not actually value social impact enough to engage in their research, it is

apparent that to some owners, and the majority of those responding to the questionnaire, the team

is not their primary revenue generating business and in some cases, is actually used as a vehicle

to offset losses incurred in other business endeavours (Ilyas, 2017). There is, however, a

consensus amongst owners of B Corporation companies, that the rigorous criteria of the

certification process, creates a structure to improve sustainability and operational practices,

whilst providing access to a like-minded network of other businesses, that belong to a movement

representing how business ought to be conducted in the 21st century (Livingston, 2012). Thus,

by incorporating an organisation's vision of CSR into an overall TSI strategy, HPSOs would

integrate their philanthropic interests with the other aims of engaging in CSR initiatives (Sheth &

Babiak, 2010).

These could involve building relationships through partnering with other stakeholders in the local community and positively impacting other areas of their business. By committing to certifying as a B Corporation and working through the business framework that underpins the certification process, HPSOs could potentially identify areas of overlap and adopt a consistent approach to meeting these objectives throughout their operation (Grimes et al., 2018).

To this end, B Corporation status might actually help HPSOs attract like-minded investors and commercial partners, that are seeking to align social messaging with the power and influence that sports entities provide. Investors are increasingly focusing on companies' social and environmental performance, with socially responsible investing assets in the five major markets (Europe, USA, Japan, Canada and Australasia) accounting for $30.7 trillion in 2018, which represented a 34% increase in two years (Global Sustainable Investment Alliance, 2018) and more than one quarter of total managed assets globally, which reflects an increase on the $18 trillion figure reported 2014 (Beal et al., 2017). Meanwhile, sponsors are aware that the perceived fit between themselves, the organisation and team identification, significantly influences their brand equity constructs (Dahlstrom & Goland, 2018; Tsordia et al., 2018).

B Corporation status has also been shown to help companies attract, retain and engage top talent around a company's higher purpose and the B Corporation community's collective purpose of leading a global movement to redefine success in business (Honeyman & Giadorou Koch, 2015; Winograd & Hais, 2014).

Employees are encouraging their employers to have a greater sense of purpose, whilst seeking to become involved in the delivery of societal impact efforts, a fact that was illustrated by employees interviewed at the Arizona Diamondbacks (Asghar, 2014; Belzer, 2015; Eccles, 2017).

When seeking to attract new customers and fans, teams are recognising that consumers are increasingly attuned to information related to the social and environmental impact of the brands to which they are loyal (Dahlstrom & Goland, 2018; Field, 2015; Mennel & Wong, 2015) and it would be complacent to suggest their sporting interests are exempt from this sentiment (Beal et al., 2017).   Research by Cone Communications found that consumers align purchases with their values, with 86% of consumers more likely to trust a company that shows the impact of its cause efforts (Mennel & Wong, 2015; Winograd & Hais, 2014).

Furthermore, BBMG reported that 73% of consumers consider the company, not just the product when making a buying decision (Dahlstrom & Goland, 2018; Field, 2015). Given the emotional investment involved in choosing which sports team to support, it follows that teams investing in their societal and environmental impact will attract sports fans that share similar values. Therefore, with many millennials aligning themselves with organisations that are socially aware, such strategies might serve to future-proof a team's fanbase.

By providing an external standard that can be embraced by business owners, certifications such as the one required to achieve B Corporation status, provide a powerful social basis for clearly authenticating the distinctiveness of an organisation's identity (Grimes et al., 2018).

Such an image is important for teams seeking to grow their brand and fanbase, in a market as competitive as high-performance sport (Villarejo-Ramos & Martín-Velicia, 2007).

Whereas much of the research concerning authentication of identity in business has focused on female entrepreneurship (Grimes et al., 2018), the message is also pertinent to HPSOs, who invest heavily in brand development and operate in an industry where employing innovative approaches to achieve high performance is rewarded (Borussia Dortmund, 2019; Brand Finance, 2019; City Football Group, 2019; Deloitte, 2019; FC Barcelona, 2019; Juventus, 2019a; Real Madrid, 2019a).

Statistics illustrate that female-owned businesses are twice as likely to qualify for B Corporation certification and three times as likely to complete certification. The research suggests that these statistics were founded on the fact that female executives are more likely to operate on values-based differences and pro-actively engage with their consumers on that level (Grimes et al., 2018). However, other studies and observations have demonstrated that many HPSOs are already actively engaging their communities and fans from this perspective (Gumas, 2018; Littlefield, 2016; Sheth & Babiak, 2010). Subsequently, it is reasonable to suggest that B Corporation certification could be an important vehicle in providing the structure and clear identity, through which the cohesiveness (the degree to which common attributes are clearly defined and self-evident) and currency (the degree to which the shared purpose is valued by external audiences) of HPSO brands can be improved (Grimes et al., 2018).

3.9 Conclusion

In conclusion, the sound business framework that underpins the B Corporation certification process, addresses all aspects of TSI, which formalise, organise and integrate a corporate entity's CSR objectives into the overall strategy for running a sustainable, profitable business that positively impacts all of its stakeholders (Clarkson, 1995; Grimes et al., 2018; Livingston, 2012; Storper, 2015).

The sports industry is a highly competitive market environment, where HPSOs are deemed both global and local ambassadors and role models. Qualifying for such a formalised certification as a B Corporation, irrespective of its legal impotence, illustrates a commitment to a vision of purpose that would be deemed attractive to the fast growing community of fans, consumers and commercial partners that identify with similar social responsibility values (Dahlstrom & Goland, 2018; Grimes et al., 2018). Subsequently, it would be considered valuable for HPSOs, already committed to creating positive social and environmental impact in their community and for their stakeholders, to explore the B Corporation certification process.

Chapter 4: Changing Practice in High Performance Sports Organisations in Relation to Internal Stakeholders

4.1 Introduction

As discussed in Chapter 1, player wages have risen dramatically through sport's post-commercialisation, as teams from 18 leagues, in 8 major sports, paid their athletes $22.2B in 2018 ($15.75B in 2013) (Sporting Intelligence, 2018). Consequently, investment in player care by high performance sports organisations (HPSOs) has escalated, increasing associated scrutiny and prompting HPSOs to undertake significant change initiatives that affect a number of their internal stakeholders (Hägglund et al., 2016; McCall et al., 2016; McCalla & Fitzpatrick, 2016; Orchard, 2009).

Implemented in the mid-1900s by state-sponsored sports institutes in Eastern Europe (J. Smith & Smolianov, 2016), Australasian and Western European organisations began investing in multiple-discipline models of athlete management in the 1990s (Smolianov et al., 2016). Exploration of such performance models by North American HPSOs has gathered momentum in line with major league player wage increases (J. Smith & Smolianov, 2016). Financial and strategic investment in these "Teams Behind the Team" demonstrates the perceived value of specialist science and medical services in contributing to enhanced performance (Arnold et al., 2019). However, given the traditional structures and cultures of many HPSOs, introduction of multiple-discipline science and medical services departments (MSMSDs) represents significant internal change that requires careful management (Gillett, 2014; Press Association, 2017).

Employing specialist knowledge to implement holistic high performance systems and meet complex needs of athletes and coaches, presents challenges in integrating numerous practitioners from various disciplinary backgrounds, each characterised by distinct codes and interests (Choi & Pak, 2007; Cruickshank & Collins, 2012a).

The promoters and barriers that impact the development of multiple-disciplinary departments from multi-disciplinary (additive), to inter-disciplinary (interactive) or trans-disciplinary (holistic) groups have been researched in healthcare (Choi & Pak, 2008, 2006, 2007). These factors are exacerbated in HPSOs, that are complex and volatile environments, inherently promoting competition, conflict and insecurity (Cruickshank & Collins, 2012a; Eubank et al., 2014; Kim et al., 2019; McEwan & Beauchamp, 2014; Reid et al., 2004).

Empirical research into the change management (Cruickshank et al., 2013; Cruickshank & Collins, 2012a), performance management (Kim et al., 2019; Molan et al., 2019; Robinson & Minikin, 2011), culture (Cruickshank et al., 2014; Cruickshank & Collins, 2012a; K Henriksen et al., 2010; Kristoffer Henriksen et al., 2010; Maitland et al., 2015; Schroeder, 2010), leadership (Chan & Mallett, 2011; Collins & Cruickshank, 2015; Cruickshank & Collins, 2012a; Fletcher & Arnold, 2011; Frontiera, 2010; M. J. Smith et al., 2013; Sotiriadou & De Bosscher, 2018; Tian et al., 2015), relationships (Leo et al., 2015; Mach et al., 2010; McEwan & Beauchamp, 2014; McPhee & Dowden, 2018; Sotiriadou et al., 2017), emotional factors (Fletcher & Hanton, 2003; Juravich & Babiak, 2015), governance and systems (McPhee & Dowden, 2018; Phillips et al., 2010; Winand et al., 2013) that prevail in HPSOs has focused on roles, responsibilities, methods and qualities of performance directors/general managers (GMs), coaches or athletes.

Most articles published about MSMSDs operating within HPSOs are based on conjecture and opinion (Drust & Green, 2013; Eubank et al., 2014; Gabbett et al., 2018; Gilbert, 2009; Halson et al., 2019; Hull et al., 2017; Jenkins, 2015; Malcolm et al., 2017; McCall et al., 2017; C. A. Speed & Roberts, 2011; M. H. Stone et al., 2004; A. M. Williams & Ford, 2009), with anecdotal prescription prevailing, often derived from subjective experience and "arbitrary amalgamations of previous prescription" (Cruickshank & Collins, 2012a).

Quantitative and qualitative analysis neither supports the efficacy of advice offered, nor confirms robustness of the models theorised (Collins et al., 1999; Collins & Cruickshank, 2012; Coutts, 2016; Dijkstra et al., 2014; Fu et al., 2007; Gabbett & Whiteley, 2017; Glazier, 2017; Grol & Wensing, 2004; Kinderknecht, 2016; Lombardo, 1985; MacNamara & Collins, 2014; Mooney et al., 2017; Moreau & Nabhan, 2012; Mujika et al., 2018; Ott et al., 2018; Pabian et al., 2017; Pluim et al., 2007; Rowe & Fox, 1980; Ryan et al., 2018; J. Smith & Smolianov, 2016; C. Speed & Jaques, 2011; Sporer & Windt, 2018; Turner et al., 2019). Expectations related to the operation of MSMSDs, notoriously lack understanding of how complex, multifaceted and involved change management processes of driving development and integration into established HPSOs are.

Leadership recruitment is often sub-optimal, rarely screening for role-appropriate attributes and skills, whilst the support MSMSD directors require to succeed is barely recognised (Malcolm et al., 2017; Ivan Waddington, 2002).

Consequently, as with the coaching sector, management turnover has become an established reflex to results failing to meet expectations, which if lacking in comprehension and clarity from the outset, are often less than rational and frequently unrealistic in the time frame permitted (Cruickshank & Collins, 2012a).

4.1.1 Aims and Objectives

Empirical research supporting best practice in change management and performance management dimensions in MSMSDs, within HPSOs is not sufficiently reported. This study aimed to assimilate and understand this research by satisfying the objective of conducting a systematic review, with thematic analysis of the change management perspectives (micro, meso and macro) and related performance management dimensions (strategic performance management, operational performance management, individual performance management and leadership of performance), employed by MSMSDs during integration into, or evolution within, HPSOs, and the subsequent intra- and inter-departmental relationships experienced once established within them.

4.2 Method

'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) and 'Assessing the Methodological Quality of Systematic Reviews (AMSTAR)' guidelines were followed to ensure an appropriate standard of reporting (Moher et al., 2009; Shea et al., 2007).

4.2.1 Eligibility Criteria

Inclusion criteria were: (1) investigations focused on MSMSDs operating in HPSOs, incorporating service provision by disciplines related to sports science, analytics, adjunct coaching [e.g. strength and conditioning], sports medicine, therapies [e.g. physiotherapy, athletic training] and mental performance [e.g. mental skills coaching, clinical psychology], in addition to communicating with coaching and management departments (2) examinations of change management perspectives (micro, meso and macro) and performance management dimensions (strategic performance management, operational performance management, individual performance management and leadership of performance) in the integration or evolution of MSMSDs in, and subsequent inter- and intra-departmental relationships experienced within, HPSOs (3) studies containing primary empirical evidence (4) studies published in an English language, peer-reviewed journal.

4.2.2 Information Sources

Table 4.1 List of electronic databases searched, years of coverage and search date

Database	Dates of Coverage	Date Searched
Web of Science (Clarivate)	1900 - 2019	27 August 2019
Sport Discus (EBSCO)	1837 - 2019	27 August 2019
Cinahl (EBSCO)	1982 - 2019	14 August 2019
Medline (EBSCO)	1946 - 2019	20 August 2019
PubMed	1946 - 2019	27 August 2019

4.2.3 Search Strategy and Study Selection

Broad subject headings and text words were used as keywords and phrases for the database search, including combinations of the following keywords adapted for each database: "sport", "high performance sport", "elite sport", "sports science", "sports medicine", "interdisciplinary medicine and science", "holistic performance", "multidisciplinary performance", "science and medicine", "high performance", "medical services", "exercise science". Citations were downloaded into Endnote (Clarivate Analytics, Philadelphia) and duplicates removed. Titles and abstracts were independently screened for eligibility by two authors. Full text versions of eligible studies were screened according to the inclusion criteria. Cross-referencing of reference lists was conducted, highlighting relevant articles not identified in the screening process. Search strategy is detailed in Appendix 1.1.

4.2.4 Quality Assessment

Studies were subjected to quality assessment using the Mixed Method Appraisal Tool (MMATv2018) (Hong et al., 2018), which enables critical appraisal of qualitative research, randomised controlled trials, quantitative descriptive studies and mixed methods studies. This informed evaluation of studies' contributions to analytical themes (Thomas & Harden, 2008). A score of 100% was classified as "high quality", 75% "good quality", 50% "moderate quality" and 0%-25% "low quality". Discrepancies between quality assessment ratings were discussed between two reviewers.

4.2.5 Data Collection Process and Data Synthesis

Data was extracted from the selected articles and verified by the reviewers, reaching consensus through discussion where necessary. Information was recorded regarding study design, objectives, context, sample size, participant characteristics, methodologies and outcomes of each investigation.

Thematic synthesis was utilised to organise, integrate and structure data from methodologically diverse studies, which included qualitative and quantitative evidence. Three-stage thematic synthesis (Thomas & Harden, 2008) was conducted by the primary reviewer.

In quantitative studies, findings correlating with change management or performance management dimensions were identified as key factors and extracted as reported in the study findings (Molan et al., 2019). In qualitative studies, findings correlating with change management and performance management dimensions were extracted as raw data to ensure analysis retained consistency with original authors' findings (Thomas & Harden, 2008).

Factors were grouped with others portraying similar meaning to construct 'descriptive themes'. These were discussed under higher level 'analytical themes', based upon current theoretical conceptualisations of change management perspectives and performance management dimensions. Results were critiqued by the secondary reviewer. Data synthesis process is detailed in Appendix 1.2.

4.3 Results

4.3.1 Search Strategy

The electronic search strategy retrieved 21,045 records, with 31 supplementary records identified through citation tracking and manual reference checks. 12,021 records subsequently remained with duplicates removed. 122 full text articles were assessed for eligibility against the inclusion criteria, resulting in 102 articles being excluded. The remaining 20 articles satisfied all eligibility criteria and were included in full review and data synthesis (Figure 4.1). Three studies focused on change management perspectives, whilst 17 focused on performance management dimensions. Data extraction details are detailed in Appendix 1.3.

Figure 4.1 Flow diagram illustrating the screening process as per the 'Preferred Reporting Items for Systematic Reviews and Meta-Analysis' methodology
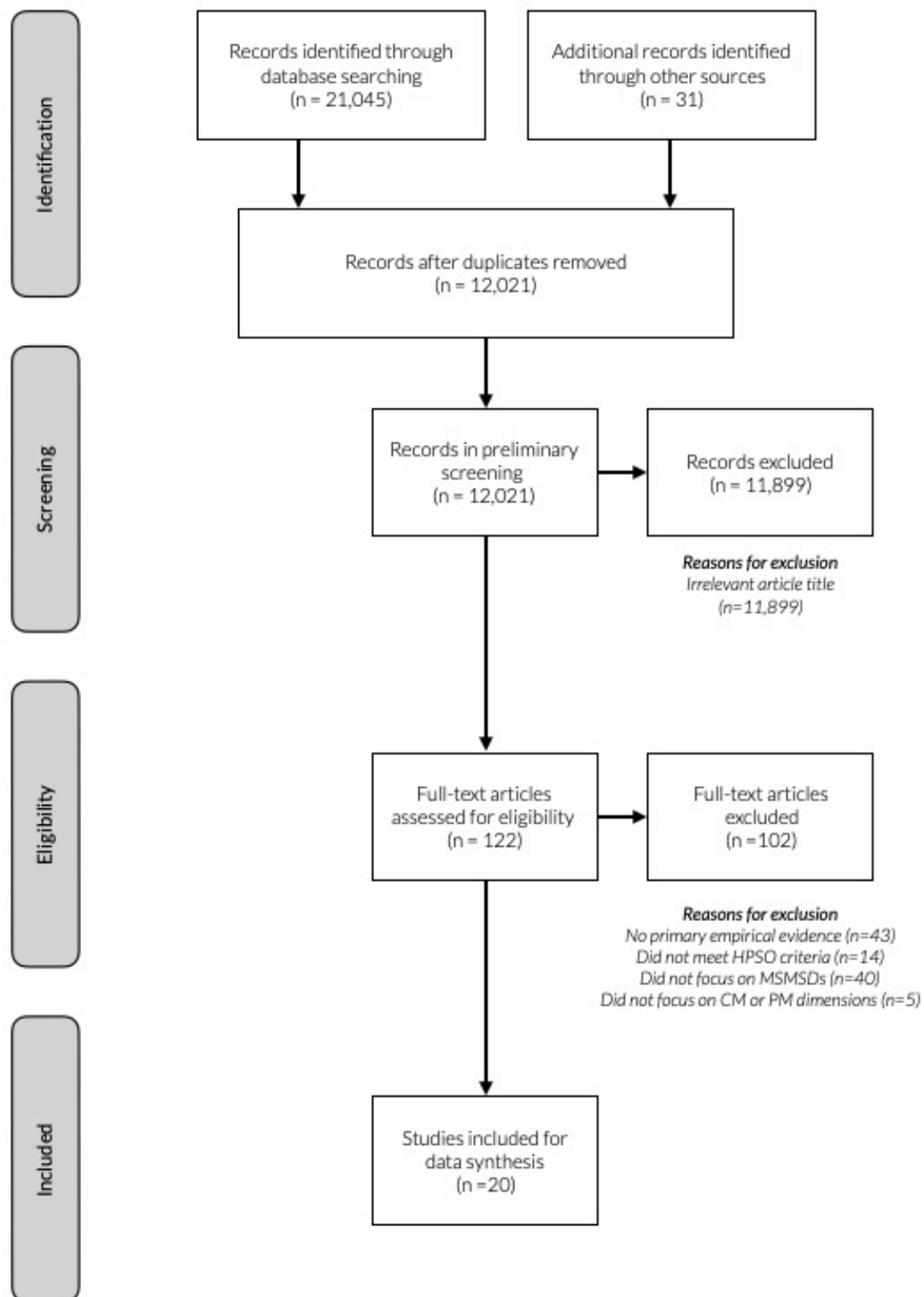
4.3.2 Study Characteristics

Study characteristics, including research design classification, sample characteristics and quality assessment ratings (cognisant of bias) are outlined in Table 4.2 (Hong et al., 2018).

Table 4.2 and Table 4.3 reference coding

[1] Arnold et al (2019) [2] Carson et al (2014) [3] Ekstrand et al (2019) [4] Elphinston and Hardman (2006) [5] Gamble et al (2013) [6] Gilmore and Sillince (2014) [7] Gustafsson et al (2008) [8] Hägglund et al (2016) [9] Hings et al (2018) [10] Larner et al (2017) [11] Malcolm and Scott (2011) [12] Malcolm et al (2017) [13] Malone et al (2019) [14] Martindale and Nash (2013) [15] Reid, et al(2004) [16] Tee et al (2018) [17] Theberge (2008) [18] Theberge (2009) [19] Waddington (2002) [20] Wagstaff et al (2015)

Table 4.2 Research design, characteristics and MMATv2018 quality assessment ratings

STUDY CHARACTERISTICS	REFERENCE NUMBER
DESIGN	
Qualitative (grounded theory)	1, 5, 14, 17, 18, 20
Qualitative (ethnographic)	6
Qualitative (narrative)	9
Qualitative (case study or case studies)	15
Quantitative (case study)	2, 4, 7, 17
Quantitative (cross-sectional)	3
Quantitative (descriptive)	8, 12, 13
Quantitative (correlational)	10
Mixed Methods (qualitative description & quantitative descriptive)	11, 19
DATA COLLECTION	
Interviews	1, 5, 6, 9, 11, 14, 17, 18, 19, 20
Observation protocol	15
Various measures of task & workload performance	2, 3, 4, 7, 8, 10, 16
Questionnaires	11, 12, 13, 19
SAMPLE SIZE	
1-10	2, 4, 5, 7, 15, 16
11-50	1, 3, 6, 9, 11, 17, 18, 20
51-100	12, 13, 14, 19
More than 100	8, 10
GENDER	
Male only	2, 5, 6, 7, 8, 16
Female only	4
Combined	1, 9, 11, 12, 13, 15, 18
Not stipulated	3, 10, 14, 17, 19, 20
LOCATION	
UK	1, 2, 4, 5, 6, 9, 10, 11, 12, 14, 19, 20
Europe	3, 8
Canada	17, 18
Other Nations	15 (Australia); 7 (Sweden); 13 (combined); 16 (S. Africa)
MMAT QUALITY ASSESSMENT	
High quality 100%	1, 10, 13, 20
Good quality 75%	3, 5, 6, 9, 11, 14, 17, 18
Moderate quality 50%	2, 4, 7, 8, 12, 15, 16
Low quality (0%-25%)	19

Methodological quality scores for the studies ranged from 25% (low quality) - 100% (high quality), in accordance with MMATv2018 (Hong et al., 2018). Consensus was reached by the primary authors on each study.

Qualitative studies represented 45% of the articles returned (grounded theory [30%], ethnographic [5%], narrative [5%], case study [5%]), 45% were quantitative studies (case studies [20%], cross-sectional [5%], descriptive [15%], correlational [5%]) and the remaining 10% adopted mixed methods approaches. 60% of studies were conducted in British HPSOs, whilst European and Canadian HPSOs were each represented in 10% of investigations. Three articles each concentrated on HPSOs in separate locations (Australia, Sweden, South Africa), whilst the remaining study was conducted on a global cohort.

4.3.3 Synthesis of Results

Results were organised under 7 analytical themes, with 3 change management perspectives (Kanter, 2009; Vakola, 2013) and 4 performance management dimensions (Molan et al., 2019): (1) micro perspectives of change management (2) meso perspectives of change management (3) macro perspectives of change management (4) strategic performance management (5) operational performance management (6) individual performance management (7) leadership of MSMSDs.

For each analytical theme, descriptive themes were identified, grouping relevant factors (Table 4.3).

Table 4.3 Thematic synthesis representing change management and performance management dimensions in MSMSDs operating in HPSOs

ANALYTICAL THEMES	DESCRIPTIVE THEMES	NO. OF FACTORS	NUMBER OF STUDIES (REFERENCE NUMBER)
Change Management (Micro Perspectives)	Resisting change	1	1 (6)
	Growth mindset	1	1 (20)
	Fixed mindset	1	1 (20)
Change Management (Meso Perspectives)	Evidence based strategic planning	2	2 (6,20)
	Supporting change (change agent)	1	1 (6)
	Research of change	1	1 (11)
	Systems & processes	2	1 (20)
Change Management (Macro Perspectives)	Institutional philosophy	1	1 (6)
	Org-wide communication of vision	2	2 (6, 20)
	Supporting change (leadership)	1	1 (6)
	Organizational change	3	2 (9, 15)
	Market driven change	1	2 (11, 12)
Strategic Performance Management	Working with stakeholders	8	6 (6, 12, 13, 15, 19, 20)
	Alignment with organizational objectives	1	1 (8)
Operational Performance Management	Addressing performance environment	17	15 (1, 3, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20)
	Building team relationships	11	13 (1, 3, 4, 5, 6, 9, 10, 11, 15, 16, 17, 18, 20)
	Internal processes & procedures	17	19 (1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20)
	Adapting culture	15	18 (2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20)
	Debriefing, feedback & learning	12	12 (2, 3, 4, 7, 8, 9, 11, 13, 14, 15, 16, 20)
	Understanding of context	8	6 (6, 11, 14, 17, 18, 20)
Individual Performance Management	Evaluating performance of people	6	7 (1, 9, 10, 11, 12, 19, 20)
	Enhancing capability & capacity of people	7	8 (1, 9, 10, 11, 12, 14, 19, 20)
Leadership of MSMSD	Autocratic leadership style	4	3 (1, 6, 9)
	Transformational leadership style	2	2 (3, 20)
	Aggressive leadership styles	1	1 (3)

4.3.4 Change Management - Micro Perspectives, Meso Perspectives and Macro Perspectives

Micro perspectives of change management comprised three factors across three descriptive themes: 'resisting change', 'growth mindset' and 'fixed mindset'.

'Resisting change' referred to employees who sought to undermine systems, processes and behaviours not aligned with their personal desires or agendas. 'Growth mindset' referred to leaders who listened to MSMSD members, empowering and engaging them to contribute to the change initiative. In contrast, 'fixed mindset' referred to leaders who drove change from top down without consulting MSMSD staff.

Whilst change and innovation are defining aspects of HPSOs, evidence illustrating how senior leaders, change leaders and employees are able to impact and are impacted by change initiatives is sparse. Evidence fails to demonstrate how leaders interact with their environment and team to increase chances of successfully introducing change, whilst supporting employees to survive and thrive throughout the process.

Meso perspectives of change management comprised six factors across four descriptive themes: 'evidence based strategic planning'; 'supporting change (change agent)'; 'research of change' and 'systems and processes'.

'Evidence based strategic planning' considered the extent to which HPSOs supported plans for implementing and integrating change initiatives with pertinent evidence acquired through research. 'Supporting change (change agent)' identified whether change initiatives were supported by designated change agents, responsible for coordinating planning and integrating new practices into current service provision. 'Research of change' considered how/if individuals affected by change, identified additional training required to maintain relevance and succeed in the evolved environment. 'Systems and processes' addressed whether designated change leaders were appointed to drive the initiative, using formal change management processes to guide the undertaking.

Results illustrated that, whilst some medical services professionals (notably physicians and physiotherapists in English soccer and rugby, plus physicians, physiotherapist and chiropractors working in Canadian and British Olympic sports), were proactive in undertaking post-graduate sport-specialisation education, HPSOs did not adequately ensure change initiatives were well managed. No evidence showed that HPSOs designated qualified change leaders, trained employees in change management practices, or utilised formal change management processes to guide research, planning and execution of such resource-demanding and potentially destabilising pursuits.

Macro perspectives of change management comprised eight factors across five descriptive themes: 'Institutional philosophy'; 'organisation-wide communication of vision'; 'supporting change (leadership)'; 'organisational change' and 'market-driven change'.

'Institutional philosophy' reported whether change was rooted in the HPSO's philosophy and strategic objectives, accordingly, perceiving initiatives to be integral to its overall vision. 'Organisation-wide communication' referred to constant and consistent reinforcement of change initiatives through communication from senior leaders. 'Supporting the change (leadership)' describes whether initiatives had sponsorship from a senior leader, with significant influence in the HPSO. 'Organisational change' described organisational awareness of how changes would impact employees and whether effects of initiatives were monitored and managed. 'Market-driven change' referred to change initiatives implemented by HPSOs in response to political or environmental influence (e.g. governing body or federal government legislation).

There is little evidence related to how MSMSDs align planning and implementation of change initiatives to organisation-wide strategic plans. This negatively impacts the development of operational MSMSDs, by affecting how HPSOs formulate and convey their expectations to MSMSD directors in relation to outcome, timing and manner of execution.

4.3.5 Performance Management - Strategic, Operational, Individual and MSMSD Leadership

Strategic performance management comprised nine factors across two descriptive themes: 'working with stakeholders' and 'alignment with organisational objective'. 'Working with stakeholders' described how MSMSD leaders worked with internal stakeholders (e.g. sporting directors, board members) to achieve departmental objectives and maintain strategic alignment through transition.

Work with external stakeholders (e.g. sports or professional governing bodies), to address governance issues or build research collaborations to develop greater scientific understanding of relevant performance parameters, was also considered. 'Alignment with organisational objectives' illustrated how leaders aligned departmental performance management objectives with strategic objectives of their HPSOs.

Evidence supported departmental strategies that facilitated relationships between MSMSD practitioners and coaches in European soccer teams. These relationships significantly influenced time lost through injury (training and games) and the assimilation of sports science into aspects of coaching. In contrast, there was no evidence to illustrate effective collaboration between MSMSD leaders and senior executives, in order to align departmental objectives with HPSOs' strategic objectives. Results demonstrated that MSMSDs within HPSOs support the strategic promotion of effective research collaborations, to underpin interventions with ecologically valid scientific evidence.

Operational performance management comprised 81 factors across six descriptive themes: 'addressing the performance environment'; 'building team relationships'; 'internal processes and procedures'; 'adapting culture'; 'debriefing, feedback and learning' and 'understanding of context'. 'Addressing the performance environment' covered creation of optimal conditions for players and staff; monitoring and managing organisational stressors; managing competition for resources and welcoming new staff. 'Building team relationships' considered team cohesion, interpersonal relationships, conflict management and cross-disciplinary collaboration.

'Internal processes and procedures' related to developing systems and processes to facilitate collaborative decision-making and working practices; monitoring emotional regulation and enhancing communication, in addition to the definition of roles and responsibilities. 'Adapting culture' reported inclusive working environments, collaborative identification and communication of values, beliefs and behaviours; decision-making consistent with values, beliefs and behaviours and integration of staff. 'Debriefing, feedback and learning' covered the use of open-system feedback loops to guide service revisions; identification of barriers to collaboration; scheduling of structured feedback sessions and implementation of research demonstrating ecological validity. 'Understanding of context' referred to how internal stakeholders regarded the impact of change initiatives and supported measures introduced to mediate it; how pre-existing operational factors contributed to outcomes; blurring of jurisdictional boundaries through the evolution of environmental factors and how collaboration between different factions affected operational decisions.

Data demonstrated that despite improved understanding, MSMSD leaders are not effectively managing factors influencing emotional labour and subsequent mental wellbeing, which causes high rates of burnout, stress and subsequent job turnover. Whilst some studies reported effective interdisciplinary functioning, others reported multi-disciplinary environments, characterised by operational silos and interpersonal conflict, which negatively affected staff and athlete performance.

Individual performance management comprised 13 factors across two descriptive themes: 'evaluating performance of people' and 'enhancing the capability and capacity of people'.

'Evaluating the performance of people' included contract issues and assessment of employees' task execution and psychological reactions to emotional labour. 'Enhancing the capability and capacity of people' covered professional development, within the HPSO and through higher education institutions, and education of employees related to the recognition and management of organisational stressors.

Results demonstrated that continued institutionalisation of sport-specific sub-disciplines (Larner et al., 2017) increases the risk of role overlap between practitioners (H. Carson et al., 2014; Gustafsson et al., 2008). This reinforces the importance of role, responsibility and task clarification to reduce risks of conflict, high levels of insecurity, low levels of trust (Arnold et al., 2019; Hings et al., 2018; Larner et al., 2017) and subsequent organisational stress within an MSMSD (Gamble et al., 2013).

Leadership was recognised as a critical contextual variable within MSMSDs, affecting change management and performance management dimensions, however, evidence detailing critical characteristics, attributes and styles of effective leadership was limited. Seven factors were extracted across three descriptive themes: 'autocratic leadership style'; 'transformational leadership style' and 'aggressive leadership styles'. 'Autocratic leadership style' factors referred to leadership behaviours causing organisational stress, including lack of openness, top-down leadership and poor communication. These were closely aligned to negative leadership traits detailed in 'aggressive leadership styles'. Conversely, 'transformational leadership style' detailed positive factors including openness, inspirational motivation and inclusive communication.

4.4 Discussion

This systematic review synthesises the primary empirical evidence on change management perspectives and performance management dimensions related to MSMSDs in HPSOs.

4.4.1 Change Management - Micro Perspectives, Meso Perspectives and Macro Perspectives

Micro perspectives of change management consider the psychological impact on individual perceptions, coping strategies and the stress imparted on those exposed to change (Vakola, 2013).

Demands for sustained success in HPSOs promote ongoing organisational change and subsequently prompt high turnover of performance staff (C R D Wagstaff et al., 2015). Change can precipitate sudden revision of strategic and operational objectives, rendering previously institutionalised systems obsolete and consequently impacting employees' roles and responsibilities (Gilmore & Sillince, 2014). Four phases of personal change are experienced by MSMSD employees: (1) anticipation and uncertainty (2) upheaval and realisation (3) integration and experimentation (4) normalisation and learning (Gilmore & Sillince, 2014). These findings highlight the potentially negative impact of change, as individuals respond to organisational stressors in a variety of emotional and behavioural ways, possibly contributing to burnout, dissatisfaction and impaired performance (Arnold et al., 2019; Fletcher & Hanton, 2003; Larner et al., 2017).

Departmental vulnerability during transition requires leaders to monitor individual and group functioning, ensuring that changes are conducted in a considered manner (Reid et al., 2004). Poor management can result in impaired group cohesion, with pervading distractions impacting employees' role execution and on-field performance, through the interdependence of athletes and support staff (Cruickshank & Collins, 2012a; Hanton et al., 2012; Juravich & Babiak, 2015; Larner et al., 2017).

Meso perspectives of change management consider the organisational context including organisational identity, values, processes and overall expectations (Vakola, 2013).

Failure to integrate MSMSD operational objectives with HPSOs' strategic objectives increases the likelihood that stakeholder expectations may not align as leadership succession occurs, jeopardising foundational systems, installed and maintained by institutional entrepreneurs favouring secrecy and inimitability. Successors may introduce practices, which weaken and undermine institutional norms and processes, irrespective of previous contributions to HPSO identity and operational success (Gilmore & Sillince, 2014).

Employees' professional values, institutional practices and expectations influence interdisciplinary conflict and cooperation (Malcolm & Scott, 2011). Consequently, operational norms in some MSMSDs have evolved, with sports physiotherapists and sports medicine physicians operating through mutually supportive relationships, which promote "close…collaborative work" practices and blur professional boundaries (Malcolm & Scott, 2011; Ivan Waddington et al., 2006).

Whilst such models of inter-professional equity are supported by evidence highlighting successful athlete-centred performance outcomes and cross-disciplinary working practices, physicians in other sporting (Dijkstra et al., 2014; C. Speed & Jaques, 2011) and geographical (Kinderknecht, 2016; Rowe & Fox, 1980) contexts have anecdotally proposed hierarchical, rather than flattened, structures, favouring medical dominance.

Successful organisational change is context specific, recognising complex interactions between tradition, systems and relationships and adopting performance management systems compatible with the culture and unique circumstances of each HPSO (Collins & Cruickshank, 2012; Fletcher & Arnold, 2011). Best practice is guided by principles that embrace and proactively manage, rather than ignore and react to, the socially complex and contested nature of culture change delivery (Cruickshank et al., 2015).

Macro perspectives of change management consider the organisational ecology, including structure, inertia, legal implications, political landscape and organisational fitness and mortality (Vakola, 2013).

Change in sport occurs more quickly than in corporate realms (Reid et al., 2004; C R D Wagstaff et al., 2015).

Consequently, MSMSD directors may not have time to establish foundational components of process-driven service models before unrealistic stakeholder expectations, or internal resisters with political agendas, persuade executive sponsors to pivot upon reaching the "messy middle of change" (Cruickshank & Collins, 2012a; Fletcher & Arnold, 2011; Kanter, 2009). Predication for hastily repeated cycles of change creates emotional labour, reducing employee loyalty and trust, whilst impacting HPSO stability. This increases potential for conflict escalation and creates pathways for opportunistic employees to follow self-serving agendas, rather than operate in HPSOs' best interests (Hings et al., 2018; C R D Wagstaff et al., 2015).

Aligning MSMSDs' operational objectives with HPSOs' strategic objectives helps overcome initial inertia, promoting departments as key differentiators within the competitive landscape and supporting on-field results that defy expectations based upon financial expenditure (Gilmore & Sillince, 2014). Allied to succession planning and retention of intellectual property, such integration can reduce risks of proprietary system deinstitutionalisation should significant change occur (Gilmore & Sillince, 2014).

The prevalence of British, Canadian and Australasian physicians, physiotherapists and chiropractors undertaking extensive specialist post-graduate education is driving change (Malcolm et al., 2017; Malcolm & Scott, 2011; Theberge, 2009), raising recruitment expectations in soccer and Olympic sports and recently influencing US HPSOs.

HPSOs are migrating towards MSMSDs from traditional models where athletic trainers provide generalist therapy services, managed by orthopaedic surgeons (Moreau & Nabhan, 2012; Orchard, 2009; J. Smith & Smolianov, 2016), as evidence highlights how collaboration between MSMSDs and coaching teams is more effective in reducing injury burden than single discipline, reductionist approaches (Dijkstra et al., 2014; Elphinston & Hardman, 2006; Tee et al., 2018).

4.4.2 Performance Management - Strategic, Operational, Individual and MSMSD Leadership

Strategically, evidence suggests that leaders expose MSMSDs to the effects of change within other areas of HPSOs, particularly coaching, by neglecting relationships with key stakeholders (Gilmore & Sillince, 2014; C R D Wagstaff et al., 2015). These results contrast with research into performance directors in Olympic sport (Fletcher & Arnold, 2011) and indicate that many MSMSD's operational objectives are aligned to those of the coaching department, rather than those of the wider HPSO. This defers ultimate control of departmental operations and employees to the head coach, thus compromising consistency and continuity of service (C R D Wagstaff et al., 2015). Succession plans, incorporating specialist managerial knowledge, help maintain institutional practices (Gilmore & Sillince, 2014), promote independent MSMSD structures that retain control over key support systems and are less vulnerable to coaching changes.

Recommendations to underpin sports science, sports medicine and coaching with high quality evidence to further impact sport, identify obstacles to producing ecologically relevant research (Grol & Wensing, 2004; Halson et al., 2019; Malone et al., 2019; Martindale & Nash, 2013; McCall et al., 2016, 2017).

Including research objectives within organisational objectives and fostering relationships between key stakeholders may facilitate collaborations between academic institutions and HPSOs (Malone et al., 2019). The bias of results towards aspects of operational performance management may indicate that MSMSD directors are often recruited based on performance related to their clinical/coaching responsibilities, rather than key skills related to change management or performance management.

Operationally, evidence demonstrates MSMSDs operating in European soccer, British and South African rugby and British, Canadian, Swedish and Australian Olympic sports are providing multiple-disciplinary services that positively impact athlete's health and performance beyond HPSOs adopting generalist approaches to sports medical services (H. Carson et al., 2014; Gilmore & Sillince, 2014; Gustafsson et al., 2008; Hägglund et al., 2016; Tee et al., 2018; Theberge, 2008).

MSMSDs effectively integrating intradepartmental and interdepartmental (e.g. coaching, talent identification) lines of service: create and resource optimal environments for staff and athletes (Arnold et al., 2019; Gilmore & Sillince, 2014; Gustafsson et al., 2008; Hings et al., 2018; Larner et al., 2017; Malcolm et al., 2017; Reid et al., 2004; Ivan Waddington, 2002; C R D Wagstaff et al., 2015); intentionally build interpersonal relationships and team cohesion; effectively manage communication and conflict (Arnold et al., 2019; H. Carson et al., 2014; Ekstrand et al., 2019; Gamble et al., 2013; Gilmore & Sillince, 2014; Gustafsson et al., 2008; Hings et al., 2018; Larner et al., 2017; Malcolm & Scott, 2011; Reid et al., 2004; Tee et al., 2018; Theberge, 2008; C R D Wagstaff et al., 2015);

underpin evidence-based systems and processes with clear vision, mission and performance objectives (H. Carson et al., 2014; Gilmore & Sillince, 2014; Larner et al., 2017; Malone et al., 2019; Martindale & Nash, 2013; Theberge, 2009); establish inclusive and collaborative cultures, founded upon shared values, beliefs and behaviours (Arnold et al., 2019; H. Carson et al., 2014; Ekstrand et al., 2019; Elphinston & Hardman, 2006; Gamble et al., 2013; Gilmore & Sillince, 2014; Gustafsson et al., 2008; Hings et al., 2018; Larner et al., 2017; Malcolm & Scott, 2011; Reid et al., 2004); employ formal research, review and continuous improvement processes (D. Carson et al., 2001; Elphinston & Hardman, 2006; Gilmore & Sillince, 2014; Gustafsson et al., 2008; Malcolm et al., 2017; Malone et al., 2019; Martindale & Nash, 2013; Tee et al., 2018; Ivan Waddington, 2002) and operate in a manner consistent with the demands of the context within which they exist (Arnold et al., 2019; Ekstrand et al., 2019; Gilmore & Sillince, 2014; Hägglund et al., 2016; Malcolm et al., 2017; Malcolm & Scott, 2011; Reid et al., 2004; Tee et al., 2018; Theberge, 2008; Ivan Waddington, 2002; C R D Wagstaff et al., 2015). If not consciously managed, these dimensions contribute to organisational stress (Arnold et al., 2019; Fletcher et al., 2012; Larner et al., 2017).

Organisational stress is the ongoing transaction between individuals and their environmental demands (Larner et al., 2017). To perform effectively, people must manage organisational stressors through emotional regulation, however, this constitutes emotional labour (Larner et al., 2017). Increased presentation of organisational stressors is positively associated with increased physical and emotional burnout dimensions, affecting focus, decision-making and performance (Larner et al., 2017).

Stressors can be mediated through the education of management strategies (Arnold et al., 2019), however, individual performance management at an organisational level is often poor, with HPSOs failing to fulfil duties of care to employees (Arnold et al., 2019; Hings et al., 2018). Optimally, HPSOs maximize their organisational performance, whilst enhancing employees' experiences and wellbeing (Arnold et al., 2019; Kim et al., 2019).

According to Signalling Theory (Molan et al., 2019), individuals need tangible information to understand organisational values and expectations. Evidence indicates performance appraisals should focus proactively on positive perspectives of individual contributions, over determining weaknesses and dysfunctional behaviour (Kim et al., 2019). Individual performance objectives should centre around organisational citizenship behaviours (i.e. alignment with the group's shared values, beliefs and core behaviours) and task performance, rather than athlete performance, health or wellbeing parameters, which include variables out with the individual's control (Arnold et al., 2019; Juravich & Babiak, 2015; Turner et al., 2019). MSMSD directors must provide clear role delineation and task responsibility, connecting how these fit with the HPSO's vision and must be intentional in developing team cohesion, interpersonal relationships and conflict management training (Arnold et al., 2019; Malcolm & Scott, 2011; Reid et al., 2004; C R D Wagstaff et al., 2015).

HPSOs operate in complex and idiosyncratic environments, where multiple stakeholders demand results related to performance, entertainment and financial profit.

Subsequently, MSMSDs must support sustained optimal performance (Cruickshank & Collins, 2012a), with directors responsible for building and nurturing multiple-discipline groups, renowned for complicated inter-professional relationships, whilst concurrently managing an expansive web of change management and performance management dimensions (Reid et al., 2004; C R D Wagstaff et al., 2015).

Specialist leadership roles have evolved, demanding a unique array of 'hard skills', required to efficiently guide MSMSDs in service of HPSOs. Dimensions of change management, performance management, governance and human resource management (Chan & Mallett, 2011; Collins & Cruickshank, 2012; Cruickshank et al., 2014, 2015; Cruickshank & Collins, 2012a; Fletcher & Arnold, 2011; Juravich & Babiak, 2015; Robinson & Minikin, 2011) are often novel for fledgling recruits (C R D Wagstaff et al., 2015), which negatively impacts MSMSD performance if the leader is not appropriately supported (Cruickshank & Collins, 2012a; C R D Wagstaff et al., 2015). Failings in aspects of MSMSD management by physicians operating in leadership roles in HPSOs have recently led to allegations and findings related to athlete safeguarding, negligence and corruption (McPhee & Dowden, 2018; Press Association, 2017), and highlight the need for education beyond the leader's primary professional training.

Research evaluating the desired qualities of MSMSD leaders is sparse, with evidence centring around negative behaviour traits demonstrated by "autocratic" or "aggressive" leaders, who micro-manage, abuse power, make ethically questionable decisions and shun evidence-based advice, causing subsequent stress (Arnold et al., 2019; Gilmore & Sillince, 2014; Hings et al., 2018).

Poor communication between MSMSDs and head coaches in European soccer, was associated with reduced player availability and increased injury burden, compared to teams that enjoyed good interdisciplinary connection (Ekstrand et al., 2019). Contrarily, transformational leadership was associated with high-quality communication, openness, increased team cohesion and collaboration, better decision-making, and reduced organisational stress (Ekstrand et al., 2019; C R D Wagstaff et al., 2015).

Commentary articles identify sports medicine physicians (Dijkstra et al., 2014; Kinderknecht, 2016; Rowe & Fox, 1980; C. Speed & Jaques, 2011), conditioning coaches (Ryan et al., 2018; J. Smith & Smolianov, 2016) and sports physiotherapists (Elphinston & Hardman, 2006; Gilmore & Sillince, 2014; Malcolm & Scott, 2011; Ivan Waddington et al., 2006) as the professional designations most suited to MSMSD leadership, however, the conjecture is predominantly clouded by author bias. Whilst there are examples, in both North American and European HPSOs, of successful MSMSD leaders coming from sport psychology backgrounds, this is not covered in the literature, beyond the role of sport psychologists being valuable advisors to those in leadership positions (Collins & Cruickshank, 2015; Cruickshank & Collins, 2012b). Empirical evidence focuses on personal attributes, reflecting leadership demands revolving around vision and inspiring people related to direction and goals, as opposed to applied, hands-on clinical or coaching skills.

As individual performance management becomes increasingly important in determining sporting success, leaders must possess the 'soft skills' required to support, develop and challenge colleagues to look beyond personal goals, whilst empowering them to contribute meaningfully in delivering their HPSO's vision (Fletcher & Arnold, 2011). Emotional intelligence attributes are necessary to accurately perceive, manage and act upon the emotions of self and others, whilst critical for managing interpersonal relations and creating bonds with the stakeholders invested in HPSOs (Frontiera, 2010). Tools that evaluate facets of emotional intelligence are, therefore, valuable resources for recruiting and developing leaders (Chan & Mallett, 2011).

Effective communication is vital for successful leadership in HPSOs (H. Carson et al., 2014; Ekstrand et al., 2019; Elphinston & Hardman, 2006; Gamble et al., 2013; Gilmore & Sillince, 2014; Gustafsson et al., 2008; Hings et al., 2018; Larner et al., 2017; Malcolm & Scott, 2011; Martindale & Nash, 2013; Reid et al., 2004; Theberge, 2008). MSMSD leaders must "speak the language" of various disciplines, understanding and respecting all skillsets represented within their department, to facilitate a collaborative and integrated community, capable of operating as an interdisciplinary or transdisciplinary team, as context requires (Choi & Pak, 2006, 2007; Sporer & Windt, 2018). This trait has most pertinence to the leader's professional disciplinary training and applied experience.

4.4.3 Practical Implications

The findings are relevant to current and aspirational MSMSD leaders and those responsible for their recruitment.

By considering the perspectives of change management and components of performance management at the micro (individual), meso (operational) and macro (strategic and contextual) levels, practitioners will be better equipped to understand, plan and implement best practice leadership in high performance sport.

Identifying gaps in performance attributes, will inform professional development plans and support the advancement of service leaders' capabilities and subsequent capacity. HPSOs will be better able to identify requirements of leadership roles and formulate realistic expectations of the processes involved in building, maintaining and evolving an effective MSMSD in their specific context.

4.4.4 Limitations

A limitation of the inclusion criteria, is that only primary empirical research studies, published in English language peer reviewed journals were considered for review. The methodological quality of one study, assessed as poor by MMATv2018 is acknowledged.

Additionally, several of the papers only concerned singular components of an MSMSD, such as the relationship between the sports physician and physiotherapist (Malcolm et al., 2017; Malcolm & Scott, 2011) or singular examples of a multidisciplinary collaboration (Carson et al., 2014).

4.5 Conclusion

This systematic review is the first study to appraise the evidence published on change management and dimensions of performance management in MSMSDs, with a view to informing service provision in HPSOs. The results illustrate how change management and performance management dimensions are currently applied in HPSOs, where best practice differs from sub-optimal practice and, how these impact both services and people. These findings will inform leaders, practitioners and HPSOs in their ongoing review, evaluation, feedback and management of people, structures, systems and processes.

Chapter 5: Investigating the Change Management Process in North American HPSOs

5.1 Introduction

Undertaking a change initiative is a risky pursuit, with most change initiatives failing to achieve their goals (Muehlfeld et al., 2012), whilst concurrently producing high opportunity and process costs, which often seem to outweigh the benefits of the change process (Jacobs et al., 2013). The implications of failing change initiatives across industry, can divert resources from operational tasks, whilst causing disruption to well-established systems and introducing scepticism and a lack of trust in employees and business partners.

Sport is one of the most hyper-commodified industries globally, with the global sports industry estimated to be worth nearly $488.5 billion in 2018, having grown at a compound annual growth rate (CAGR) of 4.3% since 2014. Meanwhile, this growth is predicted to accelerate a CAGR of 5.9% to nearly $614.1 billion by 2022, whilst being at the forefront of innovation and change in performance, consumption and sponsorship to name a few (Business Research Company, 2019). Understanding the effectiveness and process of change initiatives in professional elite sport is important to both add to the scarce amount of literature available on the subject and to help inform leaders responsible for driving change in the industry.

5.1.1 Aims and Objectives

The aim of this study is to investigate the processes of organisational change management that occur in HPSOs competing in North America and seek to ascertain the contribution that the micro perspectives, meso perspectives and macro perspectives of change management have in influencing the type of change deemed most desirable.

Through qualitative methods, accessing leaders in professional and elite sport, this study will provide empirical insights that inform both theoretical and applied understanding related to change management. In achieving the aim of this study, the objectives will be to:

1) identify how general managers/sporting directors (GMs) identify, research and strategise change initiatives;

2) explore the process of change in relation to planning, challenges of implementation and integration, and barriers to success;

3) establish how change is measured, audited and evaluated;

4) provide a number of recommendations for i) applied practice for and ii) research with GMs.

5.2 Literature Review

5.2.1 Organisational Change in HPSOs

With 71 major league franchises, representing 57.7% of all those in the four dominant North American sports leagues (NFL, NBA, MLB, NHL), changing ownership since 2000 (Badenhausen, 2016), it is pertinent to recognise that change initiatives following acquisitions in the wider business world have a poor track record of success. Around 30% of change initiatives fail prior to completion, whilst a further 70% fail post-integration (Muehlfeld et al., 2012).

There is, however, a paucity of research concerning management of change in sporting environments, either related to "on-field" aspects (Bruinshoofd & ter Weel, 2003) or "off-field" organisational matters (Cruickshank & Collins, 2012a).

One of the key roles in sport teams that are subject to change in the case of new ownership or fluctuating run of on-field performance, is that of the head coach or manager (Soebbing et al., 2015; C R D Wagstaff et al., 2015). Research from a sample of Bundesliga coaching dismissals, identified that the likelihood of a head coach being dismissed increases with the appointment of a new board president and also in teams that are highly exposed to media coverage (Salomo & Teichmann, 2000). However, even aside from initiatives precipitated by new ownership, the prevalence of management change in professional sport is recognisable as being more frequent in comparison to the most competitive businesses in other industries (Bruinshoofd & ter Weel, 2003; Khanna & Poulsen, 1995). This is well-illustrated in English professional football, where the average tenure of a manager operating in the league system is 1.47 years, with forces in the Championship reducing that duration to just 1.33 years (League Managers Association, 2016).

Further research in German football identified that the risk of a head coach in the Bundesliga being dismissed from his role increased with the relative salary of the head coach and the relative wage bill of the team (Frick et al., 2010). From a sporting results perspective, the evidence is inconclusive as to whether changing a head coach produces the desired outcome of improvement, particularly if the change occurs in-season.

In European soccer, the research suggests that beyond a potential short window of a week, within the first month, of a new head coaching appointment, there is no statistical improvement in results and a negative impact is more likely once the initial introductory period is complete. (Heuer et al., 2011; Lago-Peñas, 2011). In contrast, research in the NBA suggested that there is a statistical increase of wins, in 61% of cases where coaches were changed in-season, however, the likelihood of success increased further when the new appointment was an experienced coach, who had enjoyed a long career as a player in the NBA (Martinez & Caudill, 2013). The NHL also reported some upturn in team forms, with 4 of the previous 10 Stanley Cup champions having change coach midway through their title winning season (Rebelo, 2019).

The impact of managerial change has been shown to deinstitutionalise previously embedded practices with remarkable speed following a new appointment, even in HPSOs as established as EPL football teams (Gilmore & Sillince, 2014). Consequently, repeated change often creates an environment of destabilisation and has largely negative implications for employees' attitudes (Wagstaff et al, 2015). Employees who become sceptical of change initiatives, due to feelings of insecurity, uncertainty or unfounded fears related to their role, will subsequently demonstrate active or passive resistance to change (Rafferty & Jimmieson, 2017). This in turn serves to decrease the success of the change process, decrease productivity, reduce morale, increase employee turnover and cause organisational failure (Weber & Weber, 2001).

Furthermore, the financial cost of change in HPSOs is rising at a considerable rate. In 2017, it was estimated that NFL franchise, San Francisco 49ers were paying coaches between $30 million and $70 million not to coach, following their decision to fire Jim Tomsula and Chip Kelly after each endured just one season in charge. Not only were the 49ers tied to honouring payoffs to the head coaches in question, there were also multi-year contracts agreed with each member of their coaching staff that had to be paid out (Brinson, 2017).

Such costs are not unique to the professional game, as seven of the NCAA's college football biggest names, combined for a total $51.3 million in buying out contracts of their former head coaches (Schablach, 2015). This figure would be significant enough in the franchise world of the NFL, however, when you consider that these are public institutions, paying former collegiate employees such substantial figures not to work, it is worth noting that these dwarf payments to other public service staff such as university presidents, state governors, senators and even presidents, for actually doing their jobs.

Even in comparison to CEOs of Fortune 500 companies, head coaches of collegiate football teams, such as Nick Saban at Alabama, collect annual salaries in excess of the CEOs of Costco, Procter and Gamble, Starbucks and Delta Airlines. Additionally, in Saban's particular case, his salary represents a far higher percentage of the institution's football budget than the salaries of those respective CEOs represent to their companies (Gaul, 2015).

However, it must also be recognised that Alabama's football programme contributed 62% of the university revenue of $174.3 million in 2016-17, which translated into a profit of $45.9 million and supported other loss-making athletics programmes. Financially, therefore, understanding which factors influence the success of change initiatives is valuable.

The constant flux observed throughout HPSOs, suggests that organisational change is best described by an emergent approach in this environment, whereby change is, to a degree, continuous and unpredictable, occurring at all times, through many small steps (Tsoukas & Chia, 2002). As such, organisations are challenged to contend with concurrent change initiatives, as opposed to dealing with single change initiatives in isolation (Burnes, 2004). Arguably, however, many ongoing changes do not create significant instability throughout HPSOs (Tsoukas & Chia, 2002) and thus, the general evolution takes place over a period of relative stability, which is only punctuated by short periods of significant change, such as the appointment of a new head coach or GM (Romanelli & Tushman, 1994). The impact of such appointments may also be ameliorated in organisations where the GM is working to a long-term strategic plan, within which a head coach is operating (Nissen, 2016).

These revolutionary disruptions are in line with a punctuated equilibrium model of change, which perceives organisations as "evolving through relatively long periods of stability (equilibrium periods) in their basic patterns of activity that are punctuated by relatively short bursts of fundamental change (revolutionary periods)" (Burnes, 2004). This model complements the complexity theory of change and sets the stage for new periods in the life of an organisation.

Complexity theory describes the effects that elements of a complex system at a micro-level can have on emergent behaviour and the overall outcome at a macro-level (McKenzie & James, 2004). Whilst closed systems approaches to explaining the evolution of organisations focus on the internal elements within an organisation, complexity theory acknowledges the influence that external factors have on those elements and the impact that one element can have on another (Osifo & Omoregbe, 2011). Complexity theory rejects the closed system models, which assume linear causality between events and effects (Styhre, 2002).

Subsequently, the identification of factors that may impact change management initiatives, either positively or negatively, in HPSOs is imperative in maximising the chances of executing a successful change process.

5.2.2 Factors Contributing to Failure of Change Management Initiatives in Sport

Change programmes implemented in HPSOs have failed through flaws also deemed critical to success by research in other industries. Several factors have been described as threatening the success of change initiatives in sporting and business organisations:

1. poor communication from leadership and lack of executive support or active sponsorship for the change initiative (Armenakis et al., 1993; Ginsberg & Venkatraman, 1995; Hiatt & Creasey, 2012; Jansen, 2004; Kotter, 1995, 1996);

2. lack of understanding of the need for change by established employees and poor subsequent resourcing (Armenakis et al., 1999; Bandura, 1986; Gist et al., 1989; Hiatt & Creasey, 2012; Nadler & Tushman, 2009; Pettigrew, 1987);

3. lack of readiness for change within the organisation, or professions servicing the organisation (Armenakis et al., 1999; Hiatt, 2006);

4. political resistance in the sports or professions serving within them (D. J. Paper et al., 2001);

5. change timing, sequencing or pacing leaders (Buchanan et al., 2005; Hiatt & Creasey, 2012);

6. lack of positive attitudes to change by politically influential members of the organisation, due to personal agendas, poor behaviour, a change-resistant culture or complex organisational structure (Hambrick et al., 1993; Hiatt & Creasey, 2012; Kobi, 1996; D. J. Paper et al., 2001);

7. a clash of values between the organisation and the approach to the type of change it has adopted (Burnes & Jackson, 2011; Sikdar & Payyazhi, 2014);

8. Change saturation and lack of prioritisation at the individual and organisational levels through saturation of exposure to various change projects and lack of availability of staff to engage (Hiatt & Creasey, 2012).

5.2.3 Models Used to Describe Organisational Change

This routine lack of success highlights a need to investigate and identify which factors increase the probability of achieving successful organisational change (Rafferty et al., 2013). Whilst much of the literature pertaining to change management supports definitive 1-3 (Lewin, 1946), 1-7 (Kotter, 1995), or 9 (Hiatt, 2006; Hiatt & Creasey, 2012) step processes, in reality, change is more complex than that. It is important to recognise that a "one-size fits all" approach to organisational change is not appropriate. Organisations vary in their structures, systems, strategies, aims and objectives, markers of success, human and financial resource, each of which subsequently influences how appropriate certain approaches to change may be (Burnes, 1996).

In the world of sport, where pressures exerted by the media, fan opinion and player or staff movement can have unpredictable, yet significant repercussions on strategic planning, the study of emergent order in more disorderly systems, is relevant, as the increasing complexity leads to more change within the organisation (Chakravarthy, 1997).

Research suggests that it is important to link the type of change required to the methods employed to achieve change and the outcomes the initiative is looking to attain, as opposed to looking to identify a "silver bullet" solution that fits all situations (Al-Haddad & Kotnour, 2015).

The research on change management tends to address change from one of three perspectives:

1. Micro Perspective - which focuses on the psychological impact organisational change has on the people affected by the initiative and takes into consideration individual perceptions, coping strategies and the stress imparted on the individuals exposed to the process (Vakola, 2013);

2. Meso Perspective - which focuses on the organisational context of the company and takes into consideration the organisational identity, the institutional processes, the values of the organisation and the overall expectations (Vakola, 2013);

3. Macro Perspective - which focuses on the organisational ecology and takes into consideration the structure of the company, the organisational inertia, the legal implications, the political landscape and the affects the change process has on the fitness, competitiveness and mortality of the organisation (Vakola, 2013);

Therefore, any change initiative needs to be cognisant of the influence the individuals and the environment will have on the process, whilst also considering the impact that change will have on the individuals and the organisation within its environment.

5.3 Method

5.3.1 Design

With the author having worked for over 20 years in the professional sports industry and latterly involved in the research, planning and implementation of change initiatives in HPSOs, there is a recognition that the factors influencing such processes are extremely complex and are heavily dependent on human interaction. Due to the epistemology associated with this topic having been borne out of the desire to understand the perceptions that shape the actions of those leading the initiatives and the specific contexts in which they are operating, it is appropriate to adopt an interpretivist approach to investigating the change management processes that are employed in HPSOs (Crotty, 1998).

In seeking to understand the identified components of the change initiatives that take place in HPSOs, the most appropriate people to engage with, are those that are often directly responsible for the appointment of performance directors (PDs) or managers. In most cases, these are the GMs that are employed by the HPSOs.

Adopting an empirically based orientation to the study will interrogate information collected from GMs based in the field and use the results to draw conclusions that can inform practice within the industry and research about the industry.

It is, therefore, necessary to identify a qualitative tool to collect and analyse the primary data required to inform the investigation (Wahyuni, 2012).

Employing a personal structure, and involving interaction between the researcher and informing subjects, will ensure the data collection is more receptive to capturing meaning within the human interaction (Black, 2006) and is best able to make sense of what each subject perceives as reality (D. Carson et al., 2001). By incorporating a degree of flexibility into the structure, the information offered by the informing subjects will be permitted to shape and develop the study accordingly. This is imperative when considering the available research, whilst also seeking to understand and interpret the characteristics of human behaviour that are the result of specific motives, meanings and reasons at play in driving change processes, specific to the context of the sports industry at this point in time (Neuman, 2000). Consequently, employing a dialogue-centred approach with the use of interviews, is considered the most appropriate form of data collection. Given that the researcher has previous knowledge and experience of conducting change initiatives in HPSOs internationally, including in North America, a semi-structured interview method would enable a reciprocity between the interviewer and subject (Galletta & Cross, 2013).

Whilst, the interview structure guides the exploration of the research area, by collecting similar themes of information from each of the subjects interviewed, thus facilitating comparison between the interviewees' responses where appropriate (Holloway & Galvin, 2017), the follow-up responses to the participants' questions can deviate from the interview structure and be improvised where necessary (Kallio et al., 2016).

Once recorded, data from the interviews enters a 6-step method of thematic analysis for identifying, analysing and reporting patterns within it, (Braun & Clarke, 2006). These steps are:

1. Repeated review of the transcripts taken from the interviews, making pertinent notes in the margin. This familiarises the researcher with the data contained in the interviews and enables recognition of patterns of meaning and potentially interesting issues that are present within it;

2. Develop observations to produce preliminary descriptive and interpretive codes, according to information recorded in the entirety of the transcripts, potentially relating to information discussed in the literature review and theoretical concepts used to guide this area of research;

3. Examine the preliminary codes and the potential relationships between them, in order to identify connections and patterns. This will lead to the development of broad themes and theme piles. From here, sub-themes are formed;

4. Themes are refined, to ensure there are "clear and identifiable distinctions" between them. This process begins with a review of the coded data extracts, to ensure a "coherent pattern is formed", continues with a considered assessment as to the validity of each of the individual themes in relation to the data set, and then as a cluster, to ensure the meanings evident in the data set, are accurately represented. At this point, any additional data within themes, that may have been previously missed, is also coded.

5. Examine the themes identified from the interviews, establishing clearly defined themes to be presented for subsequent analysis. Each theme's "story" must be identified and considered, in relation to how it will be used to answer the research questions and form the basis of the discussion, in reference to the other emergent themes identified in the literature. At this point, overarching themes are identified and within each, related sub-themes are developed.

6. The content of the analysis is written up, with the meaning of the themes identified within the data reported, using appropriate data extracts to illustrate the story both within and across the themes. The research questions are then debated in relation to the findings of the analysis.

Whilst the guidelines outlined above identify 6 distinct phases, it should be remembered that the analysis is not a linear process, more a recursive one, with the researcher moving back and forth between the phases, as required.

5.3.2 Participants

As previously stated, the most appropriate people to engage with, with first-hand knowledge and experience of operating in the environment identified in the study's aims and objectives, are those that are often directly responsible for the appointment of PDs or managers.

These were identified as GMs employed by the HPSOs. A purposive sampling technique was employed to recruit subjects. Therefore, the selection criterion stipulated that subjects had to be either a current GM of a North American professional sports franchise or governing body or have held that role within 4 months of participating in the interview.

The sample consisted of 5 GMs (5 males), aged between 40 and 50 years ($M = 44.4$, $SD = 3.2$). The participants had worked in professional sport, in a non-playing capacity, for between 10 and 23 years ($M = 18.2$, $SD = 4.79$) and had served in their role as GM for between 2 and 13 years ($M = 6.2$, $SD = 4.49$).

Table 5.1 Demographic of respondents

	Range (Years)	Mean (Years)	Standard Deviation (Years)
Age	40 - 50	44.4	3.2
Years in Sport (Non-Playing Capacity)	10 - 23	18.2	4.79
Years in Role	2 - 13	6.2	4.49

5.3.3 Ethics

A proposal outlining the intended methodology, which included a participant information form (Scahill, 2015) and a participant consent form (Stanford University, 2016) was submitted for ethics approval. The research proposal was reviewed and granted ethics approval by the University of British Columbia's Behavioural Research Ethics Board (BREB), following completion of an ethics risk assessment, in accordance with their research governance policies and procedures.

5.3.4 Interview Guide

To investigate the purpose of this study, a four-phase interview guide was structured.

Phase 1 outlined the purpose of the investigation, explained the interview process and covered the ethical considerations pertaining to the rights of the subject, including anonymity, confidentiality and rights to withdraw from the process.

Phase 2 required subjects to confirm understanding of the information and provide written consent to participate in the study.

Phase 3 consisted of questions relating to 5 general themes exploring:

i)   the subjects' professional background in addition to roles and responsibilities in
     organisational change management (Abrell-Vogel & Rowold, 2014);

ii) the process undertaken by the organisation in relation to identifying change initiatives, and
     the subsequent strategic planning that precedes implementation (Armenakis et al., 1993; D.
     Paper & Chang, 2005; Parahoo, 2014);

iii) the process undertaken by the organisation in relation to implementing and integrating
     change initiatives (Gilmore & Sillince, 2014; Jansen, 2004; Rafferty & Jimmieson, 2017);

iv) the process undertaken by the organisation in relation to audit of change initiatives to
     evaluate success of implementation in the short, medium and long term (Jansen, 2004; Sikdar
     & Payyazhi, 2014);

v)   any other topics that the subject considered important in discussing the change management
     processes that occur in their organisation.

The interview framework was used to guide the interviewer on the topics to be considered and the information to be covered. However, the interviewer could dictate how the questions were phrased and how the themes were linked, in order to enable a flow to the conversation.

Phase 4 consisted of a summary review and permitted subjects to ask any outstanding questions related to the process.

Prior to the study being undertaken, a pilot interview was conducted with a performance director, who was not involved in the data collection. This facilitated evaluation of the interview process and a refinement of the interview guide.

5.3.5 Data Analysis and Representation

The interviews, which ranged in duration from 33 to 76 minutes (M = 61.4, SD = 17.54), were digitally recorded in their entirety and transcribed verbatim. A pseudonym was used to identify each participant and all dialogue containing identifiable information, relating to individuals or organisations, was anonymised.

Thematic analysis was then conducted, to answer the research questions and form the basis of the discussion, in reference to emergent themes identified in the literature (Braun & Clarke, 2006). The first phase of this, involved initial review of the transcripts, with notes made in the margins, to identify general points of discussion. The transcripts were then reviewed again, with specific topics in the commentary being grouped, which facilitated subsequent identification of general themes and sub-themes.

Themes were defined as information that was perceived as capturing something important about the data in relation to the study's purpose and represented a level of patterned response within the data. With the themes and sub-themes clearly defined and named, responses were colour-coded, categorised and pooled, enabling definitive allocation of responses to each (Braun & Clarke, 2006).

Once each theme was populated with all relevant dialogue from each participant, the data was then presented using verbatim extracts. This method allows the reader to build up a familiarity with each of the subjects and develop an understanding of the context in which they operate (Lincoln & Guba, 1985; Pettigrew, 1987).

This was particularly pertinent given the observations identified in the literature, suggesting that specific approaches to change initiatives are influenced by the structures, systems, strategies and characteristics of each individual organisation (Burnes, 1996) and that the methods employed to achieve change and the outcomes each initiative is seeking to attain should be linked to the type of change required (Al-Haddad & Kotnour, 2015).

Similar contexts and approaches to each particular theme were linked, in order to help identify patterns and similarities between contexts. These were then presented, in relation to the micro, meso and macro perspectives influencing the outcome of change initiatives (Al-Haddad & Kotnour, 2015).

The results were then discussed in turn, in order to develop two theoretical frameworks of change in North American HPSOs.

The first framework was considered appropriate for implementation in environments demonstrating a predominantly emergent model of change and the second deemed appropriate for implementation in environments demonstrating a predominantly punctuated equilibrium model of change (Parahoo, 2014).

5.4 Results

The interviews were undertaken by five subjects, either currently in role, or having left the role in the last 4 months, as GM at North American HPSOs. Interviewees came from organisations in soccer (one MLS team, one governing body), American football (NFL), baseball (MLB) and rugby (governing body). Two are Canadian, one American, one from New Zealand and one Australian.

Analysis of the semi-structured interviews identified a number of clear themes that are discussed in reference to factors affecting change initiatives throughout a variety of industries, as reviewed in the change management literature. These are considered against the micro, meso and macro perspectives influencing the outcomes of change initiatives.

Table 5.2 Process evaluation themes and sub themes

OVERARCHING THEMES	THEMATIC SUB THEMES
Micro Perspectives	i. Group-led change ii. Mindset of change leaders in organisation (Growth Mindset vs Fixed Mindset)
Meso Perspectives	i. Bias towards systems & processes operating framework ii. Role of evidence-based research in driving change iii. Role of culture & philosophy in driving change
Macro Perspectives	i. Organisational resistance ii. Relationship between owners & senior management in organisation

5.4.1 Micro Perspectives of Change Management

A common approach to change management that was discussed throughout the interviews, centred around the involvement of the employees working in the department undertaking the change initiative and the role they play in leading the project. There were two identifiable approaches taken, which reflected the respective cultures of the organisations within which the change initiatives were occurring.

One approach encouraged staff at all levels to identify gaps in the existing service, or trends that were occurring in the industry, that they would like to see adopted. Such observations were then brought to a collaborative review process and a system was in place to subsequently research, evaluate relevance, ascertain feasibility of adoption and assess practicalities of implementation, alongside value to the organisation. This approach welcomed a variety of external expert opinion to guide and support the process where necessary. GM B reflected on his level of knowledge in certain areas and recognised the need for those in whom he trusted to contribute in their area of expertise, "I only have a little bit [of knowledge] and that's dangerous, so we have to involve others. So, it's all the staff, it's where they want to see it go, where they want to see the departments go. There's a lot of interaction internally to saying what are we missing, what are we growing and that's everything from equipment, to methodology, to performance planning, to periodisation, absolutely everything to do with the athlete… the constant question is "how do we get better?".

GM C voiced a similar opinion, "Very reliant on the expertise and talent of the staff to identify where gaps are, or where trends are moving.

Then we typically utilise centralised services, through either a sports government agency or our own governing union, World Rugby, to look at how they can support in providing new innovation and potentially technological changes, that maybe best practice…We have a somewhat of an inexperienced staff, if you looked at the world standard, they're not best in class. So, they are always hungry and wanting to learn and change and evolve, both themselves, and the programs, for the betterment of the players and the team".

Once implemented, staff would be given the space, structure and time to allow them to work through the integration phase, providing support as needed. Each employee was held accountable for their work but were allowed space to make mistakes and learn from them, to promote evolution and achieve improved outcomes in the future.

GM B explained, "create the space and the structure and the flow in what they need within those areas…there's rationale, there is some scientific, there's also opinions coming back from staff and what they need to perform and then we hold the individual accountable". He continued, "We allow people to fuck up and make mistakes and the hope is that they learn from it".

The second approach described a 'top down' introduction of the change initiative, with ownership or senior leadership identifying areas of change. This approach sought to involve departmental employees where possible but the process of gathering opinion, researching the initiative, reviewing the information and staging the implementation was neither structured nor clearly defined. GM A reported that "99% of the new ideas, be it from a sports psychologist, everything that we were trying to implement, came from recommendations from [the owners].

So, everybody was like "well, if the Ownership wants it, we're going to go fully-fledged in it".

GM A recognised this approach was likely adopted due to ownership's well-meaning interest, "I think on their part, maybe a little more of their naivety, as in 'hey, if this is going to help us, everybody should be accepting of it'. That's how they are…that's one of the good things about them, if they see something that's at the forefront of helping their athletes, or their organisation, get to the ultimate goal of winning a championship and we can be the first to do it, they're all for it".

This approach effectively coloured the perception of the change initiatives from within the departments and GM A noted, "Scepticism, and a little 'well, it doesn't matter what I think, the bosses want it, so let's try to do it', but you're going to have that little resistance". This subsequently put a lot of the onus on him, as GM, to get everyone on board with the proposed change, which tested his leadership acumen, in trying to bring some degree of collaboration to the initiative. "In any area of the organisation that's going to be affected by whoever we bring in or whatever we're trying to do, to sit them down and ask, 'ultimately what is your goal of being the head athletic trainer, the head strength coach?'. Let's start with common ground we agree upon and then slowly from there, matriculate this new 'whatever we're bringing in', be it performance, psychology, whatever, just slowly integrate it into what we're trying to do. And make sure that, whoever's going to help implement it from the outside, understands what the dynamics that that person is going to deal with, coming in as a new person, trying to get something new, that people most likely don't understand and are not comfortable with…try to make it a collaborative decision. I would bring it to the table, show the pros, the cons and try to get a consensus and get everybody onboard".

GM E described a similar unilateral approach to change, in relation to the changes implemented by the Head Coach. "If you're talking about a head coach, it's obvious, there's always going to be a transition period and 'til you get to know that head coach and how they want to do things, there's always going to be a learning curve…I can't say that you can really prepare for it…having done it perhaps several times and knowing that there are going to be changes that are going to be implemented on how they do things…But at the same time, know that the final decision is that of the head coach".

The performance science aspect of the operation, GM E explained, is led by the medical director. "Our medical director would come and say, 'I've engaged with a professional in this field, sports science field, specifically to managing altitude'. So, that's a good example…". This approach did seek outside opinion but there were suggestions that this might sometimes be in reaction to an innovative approach being implemented, as opposed to part of a more proactive process, to identify innovation and that the range of expertise gathered was not as extensive. GM E continued, "the medical director comes to me, we then contracted out this professional in the sports science field, to work with us in regard to preparing the players for playing at [stadium at altitude]. He provided a research paper that he did on playing, specifically at [stadium at altitude] and then we looked to implement his findings in our preparation towards playing there in the [competition], to prepare them for what it was going to be like in [city at altitude]….in terms of the research side of it, that would be left up to our medical director. And then, based on his vast knowledge and contacts in the sports science field, if there's something specific, we rely on them. They do provide us with the research to back it up, so we don't go in there blind".

GM A identified a time where a change initiative was launched through ownership, when his workload was at its peak and little research had been done prior to the implementation, which was brought to him to manage. "My main reason was time constraints. The times that, when we were there, be at the start of training camp, when we're trying to implement a sports psychologist, or around the draft time…Now, if I did it again, I would say, 'let's get all the information', and then once it's down-time, right after the season, or right after the draft, when I could pull all my resources, my time, to really develop and devote…".

One organisation, that appeared to be in a transition phase with regards its approach to change management, reported a desire to involve employees at all levels but acknowledged that internal knowledge and experience in the field of the change initiative was currently a limiting factor. This was being addressed by recent appointments in leadership positions but there was an understanding that it would take more time for the systems, processes and cultural changes to be implemented to a level where group-led change would be effective. GM D explained, "[The Performance Director] is leading that. [Performance Director] and [Assistant Performance Director]…But ideally, I think, what we would be doing, would be all of those department heads that I just mentioned and the manager, would be involved and then depending upon the area, there may be other leaders in specific departments, or specific areas of expertise that were involved…And, if you can, include people in the process of determining, deciding why and how you're going to have that philosophy, great. That's just not always possible, especially in the area of performance services. It might be more possible in the area of what our pitching philosophy is going to be, but in the area of performance services, a lot of our leaders and decision makers aren't going to have as much experience with those. It's going to be foreign".

These two approaches to how employees are involved in initiating and implementing change initiatives are potentially related to whether the employees of the respective organisations demonstrated a growth mindset or not, which can also be considered a micro perspective that influences the outcome of a change process. GMs B and C both refer to environments where the employees at all levels, openly portray growth mindsets.

GM B discusses several examples of reflective practice, illustrating a willingness to review practice, learn from mistakes, and reach out to external organisations to support a drive to achieve best practice. In relation to on-field performance review, GM B states, "That's weekly, we'll go back and say, 'Did we reach these goals on this basis?'. There are variables that happen on a weekly basis - the player being sent off, conditions, is it hot, is it humid, players, are our players not used to it, did we not cover the distance that we expected to cover but again that just gives feedback and then that enables us to say 'okay by and large we were still able to achieve our goals even though we were short in this area'."

This is mirrored when GM B discusses reviews of the aspects related to the scouting department, "Okay, we couldn't move the right back. Why is that? Were we asking too much? And then, 'Are they not good enough? Do we have to readjust on what we are looking to move that player for?' and 'How does that affect who we're bringing in or what we're bringing in?'. So, there's different layers to it, there's just constant review, constant feedback. There's regular meetings that I have with every department to look at it and that happens with the coach every week".

A further comment relates to the same process occurring in the performance department, "And then there's the overview. And then there's the analysis at the end of the season, to say 'how many players did we lose by soft tissue injuries?', 'what are the variables?', 'are we better or worse than last year, just looking at basic stats?', 'how do we align with the rest of the league?'".

It is apparent that this growth mindset is underpinned by an acceptance that mistakes are an important part of the learning process in the organisation, "So now we have discovered that to avoid making - and this is because we've made mistakes - everyone makes mistakes, we have to analyse the mistakes and learn from them. So, there's now this document in place, to where it really comes back to, there's a twenty-point checklist for me".

GM B also demonstrates a recognition that seeking external opinion is an important part of this process. "We also have a resource in [external consulting company], which, [external consulting company] is who we hire our sports performance staff through and so they are constantly in a consultation method for us, as far as this is where we're at… and they are a good sounding board because they do work in other clubs they are…they do have some of the top clubs around the world and they can tell us what these other clubs are looking to do and how they go about it and that feeds into different discussions and different ideas that we may be able to implement but a lot of it is relying on the knowledgeable individuals."

This approach to personal and departmental development reflects the views of GM C, when he comments, "[the staff] are always hungry and wanting to learn and change and evolve, both themselves, and the programs, for the betterment of the players and the team…the staff are very open to innovation and change and best practice".

As with the environment described by GM B, GM C illustrates an openness to reflection, critical review and self-assessment, as to how employees are holding themselves accountable in his organisation. He explains, "All of our programs receive annual 360º reviews. Staff assessing their own staff and team members, staff within that program assessing their program and reflecting on the KPIs that were established for that program and initiative… There's a tremendous amount of self-reflection and 360º reflection against all of those members of the team and the initiatives they're responsible for impacting, and then we follow that up with a panel review of the outcomes that were set for that program and were being contributed to by a member of staff".

In contrast, GM A demonstrates a personal growth mindset, not necessarily shared by others in his sport or organisation. He comments, "the thing about the NFL, there's a lot of old guard there that want to do things that have been done that way for years. I'm a little outlier in the NFL. Efficiency and working smart and efficient is actually frowned upon and not looked at highly". GM A continues, "I was always of the thought process to investigate something, and not just do it just to do it, but let's do it because it's going to make us better and it's going to help our team, it's going to help our players, it's going to maximise performance…

If you listen to anybody that talks about the NFL, they glorify the grind - the guy that's in there at 6 and doesn't leave till 3 in the morning. To me, in any other business model that's frowned upon and in NFL, efficiency is frowned upon. So, I say that, as that has always made me intrigued about performance enhancing and performance psychology and performance…anything that helps make our guys increase their performance in the most efficient way".

This observation was not limited to one area of the organisation and GM A gives examples of fixed mindsets, employed for different reasons in different departments, when he observes, "you would have got a little resistance from the people from the performance team [in relation to introducing change initiatives in the performance field], as in strength and conditioning and training staff. Just because it's a protective area. That's their baby, they know about it, they think they're the guys that we've put our trust into to lead that area of the organisation. So, it was a little protectionism and that's where you get a little bit of that. On a lesser extent, would be the coaches and that's just more because they don't understand it and again, they're in that mindset of 'why do we need to change? It's been done this way forever'…it was as a lot from the guys that were going to be directly affected by what their programme, what they were trying to institute, what they've done for in the past and what they believed in. Embracing something that isn't what they're used to and accepting it and actually believing in it and promoting it".

Whilst GM A promoted looking outside the organisation and the sport for inspiration, this approach wasn't welcomed by other employees.

He recalls, "I would say it's a copycat league. Everybody's really trying to see what every other team's doing and that was one of the things that I was trying to promote. Let's not be the second or third to the table, let's have people copying what we're trying to do and that's why I was trying to push the initiative as much as possible. We looked at other leagues - soccer, baseball and rugby". However, the response to such research was portrayed as being somewhat negative, "You get the resistance 'well, that's their league', 'that's not the NFL', 'things are different, different schedules, different number of people, different effects on the practice schedule' - be it direct pre-training camp or during the season. So, again that's where you get the resistance. 'Well you can't use what you learn from soccer or rugby or any other sport and apply it directly to football', so that's where I saw a lot of the resistance".

The transitional environment within which GM D operates, demonstrates a mixed mindset, where the senior management are working hard to establish a growth mindset throughout the organisation but a long-established core of staff hail from an era that demonstrates more of a fixed mindset. The approach the leadership group are taking is to build the drive for learning into the new values, that have been chosen to underpin the organisation, which are outlined in the acronym 'CLEAR', which stands for 'collaborate, learn, empower, achieve (through process), respect'. GM D highlights these values as the key factor in achieving a successful integration of change initiatives within the organisation, "I fall back on values…collaboration, seeking to learn, empowering people, really high standards and respecting all walks of life in the job".

5.4.2 Meso Perspectives of Change Management

Interrogation of the meso perspectives that have been shown in the literature to influence the outcome of change initiatives, further demonstrates diverse approaches between organisations, that reflect those seen when reviewing the themes related to micro perspectives (Vakola, 2013).

GMs B and C both describe environments with clearly defined cultures and philosophies that have been developed over time, which drive the behaviour of each employee and set standards of practise that everyone works to achieve. These environments are built upon systems and processes that underpin each aspect of the respective organisations and extend to how change initiatives are undertaken, through thorough research and planning. As such, these environments are more reflective of a punctuated equilibrium model of change, whereby the organisations demonstrate a degree of maturity, with an established culture and as such a gradual evolution is taking place.

GM B reinforces the general perception of relative stability, which tries to insulate the organisation from episodes of significant change, when he says, "the style and the philosophy shouldn't change, individual game day tactics can, but our overall view and the branding of the club has to remain consistent". GM B explains that this culture is driven from the very top, starting with the owner, "Culture, philosophy, he helps drive it. 100%". He also identifies this responsibility as being one of his key roles in the organisation, "Roles and responsibility? Culture, driving the philosophy…overseeing the culture, the philosophy of the club. Driving those two".

This culture has its roots in the fabric of the city but permeates through to every level of the organisation and dictates who is recruited. GM B continues, "…for us in [franchise city], a lot of it is about culture and belief and philosophy…and we have a very descriptive part of how we describe our club - and the players on the field and then everyone must reinforce that. In [franchise city], we know there's blue collar, so we don't have a superstar. We all must believe in the basic ingredients: that hard work and perseverance equals success, with a level of intelligence, obviously". This culture is clearly defined in a 140 page document GM B calls his "performance plan", which describes in detail the club's "philosophy, objectives, culture values, winning and high-performance culture, the playing philosophy, the principles of play, the style and system, the position profiles, positional key performance indicators, player roles, club KPIs, club management and development, job descriptions, coaching, scouting, sports performance and medicine". This document has evolved over the years, with direct involvement from the owner and this "is the first year I gave it out to every coach in the club and it was hard to do it but you have to trust the folks you work with but it's important. Originally it was given to the head coach saying, 'make sure everyone else understands it'. Now I've felt after sharing it, everyone's aware of everyone's roles within the club as well. We all have the same bit of information. Tell me if you disagree, otherwise we're all aligned and we're going in the same direction".

GM B explains that when the organisation seeks to undertake a change initiative, they "follow a similar structure…a process that we follow to get maximum information, maximum buy-in…the same process and same diligence that we would put into scouting a player, we should put into hiring and is should be all inclusive".

The system empowers the staff to identify areas of innovation, follow a process of interrogating "scientific research", undertake a comparative review of what other organisations are doing in the area and subsequently conduct a cost/benefit analysis of "budget, budget spend and return on spend". It continues to guide implementation and the objective "review process", where data is used to support the evaluation. GM B explains, "we build out several flowcharts in different departments, we follow a process and protocol, then we analyse, then we go back and see what data was used and how that data influenced the decision".

GM C agrees that cultural fit is a key consideration in recruiting staff to work within the organisation. He states, suitable candidates must demonstrate, "specific expertise, culture, suitability to work with other staff members…accessibility and ability to be in our environment". Similarly, the culture empowers the appropriate people within the organisation to drive change initiatives that are identified as being necessary through thorough evaluation. GM C explains, "we'll build out the team, looking at a SWOT analysis, of what we do and do not have, or what we're trying to achieve…say it's the efficiency of the logistics and operations for a particular program, we utilise a traffic light scoring system against the KPIs that we'd set for that particular aspect of their program. So, it's either a raw score, 1-10 or 1-5, whatever it might be depending on the weighting and importance of each initiative, and then, for things that don't have a black and white answer, we use a traffic light system. Where we're looking to increase and enhance world class delivery or, red light, we've got some big issues here and we've got to make some initiative changes…Off the back of that, we will then identify the appropriate people on staff, or within our sector, that can support us in innovating and developing various aspects of our game".

In contrast, the cultures described by GMs A and E, reflected the cultures of the sport in which they operated, as opposed to one unique to their organisation, underpinned by specific values or identifiable standards to which each employee had contributed and was held accountable. In relation to recruitment, GM A mentions they wanted, "to see if this person's personality, could it fit, not only with what we're trying to do, but in an NFL situation with coaches and strength and conditioning staff, because it's a unique system. It's a unique environment…So, a lot of it was personally sitting down chatting with the person, talking to references, listening to their experiences in the sports world and see how relative they are with what they will be getting exposed to in our industry".

Similarly, GM E describes evaluating potential employees' fit for working in a team environment. "One of the things that we're always very careful of…is that not everybody fits into a sports team environment. You have to have a certain personality, a thick skin. You have to be able to take banter but that is something that we do a lot of due diligence on before we bring anyone into the team environment…We've brought in people that don't fit into a team environment. They don't know how to handle players, having the piss taken out of them. They don't know how to handle banter, they're, either defensive or they overreact to things".

This absence of a clearly identifiable culture within either of these two organisations was not the only common environmental factor GM A and E highlighted in their interviews. In comparison to GMs B and C, there was much less emphasis on structure, systems and process when describing change initiatives and other aspects of the operational undertakings.

GM A portrays a degree of frustration that, due to time constraints, allied to change being imposed at short notice, without due process and elements of resistance within the organisation, he was unable to put systems in place to support the implementation of change initiatives. "If I had been able to devote time, in trying to develop a system to implement this, I think we would have had a better chance…we had a sports psychologist come in and he was from baseball. He came in, probably three or four days before the start of the camp". GM A continues, "We just never were able to implement something long enough to have tangible results or tangible ways to say 'yes, I can see an increase by 5% or a 10% increase'. There's that timetable. It takes 1-2 years before we can say, 'look at percentage and put a numerical value on the success, or lack of success'. So, with the short period of time that we did try to implement things, it was more up to feel and 'how's it going? What do you think of it? What's the good? What's the bad? Do you think this has a future?'. Then just feeling it out…if you have enough time to get the numerical data, that's easy to determine but the buy-in, not only from the players, but whoever is implementing it in the organisation, from the person heading the program". This reflects an organisation that is more unsettled and as a result is experiencing continuous, unpredictable change occurring at all times, which is in line with an emergent model of change.

GM E, on the other hand discussed a review process but no specific systems and process that guided the research, strategic planning, implementation and integration of change initiatives before the audit phase. GM E explains, "We do post project reports…We do overviews so that we can share that information and it's not just word of mouth…we try to put that down in paper."

As with the results that described the micro perspectives affecting the outcome of change initiatives, GM D describes his organisation's transitional nature. There is an obvious understanding of the importance of establishing a clear organisational culture, underpinned by shared values and standards, to which everyone is held accountable allied to the systems and processes that are being introduced to drive the organisation in relation to change initiatives.

Illustrating the evolution of the organisational transition, Sporting Director D identifies, "Our challenge is different, because the concept of high performance of, whether it's sports science or sports psychology or just having elite processes in making medical decisions is new to [my organisation]. Nothing that I just mentioned is new to [my former organisation]. I think the biggest opportunity is just finding ways to systematically help players be healthier, stronger, more durable and more focused on specific and measurable goals. And with 200+ players, if you can do that systematically, you can beat people". GM D explains that the systems driving the identification of change initiatives rely on research and evidence being a key part of the process in all aspects of the operation. He says, "ideally it's evidence based, and it's something that we can say, 'we have concrete reason to be trying this'.

It's not always going to be, but ideally there is significant research and evidence, not just ours, behind why we should be using something…a lot of the research I think that we are doing, that some other sports aren't doing, when we interact with [successful NBA team], the Navy SEALS and with [pioneering NFL team in relation to performance science], it seems like baseball is ahead of most sports teams that we've interacted with, on the regression analysis of performance metrics…looking backwards to find indicators of future success.

That is particularly robust in the identification process, becoming more robust in the development process and now we're going to start that in the performance process, which is tied to the development aspect".

In contrast to the situation GM A experienced, GM D reflects on an environment where the desired culture is being steadily established and there is an understanding that change initiatives take time to integrate and evolve but their success is reliant on the culture of the organisation becoming more dominant than the historic culture in the sport. He explains, "because our values are…probably the most integral piece to how we're integrating change and how we're creating change, is by having our values drive it". However, reflecting upon the challenges of introducing change initiatives, GM D observes, "it's cultural, it's new to professional baseball…but throughout that all of that has to be our values. And if those come in question, then we need to really think twice".

This transitional environment indicates an organisation that is currently experiencing continuous and unpredictable change, in line with the emergent model of change.

However, the suggestion is that, as the significant pillars of the organisation are put in place and become established, there will be a metamorphosis to a more stable environment where the punctuated equilibrium model of change is more representative. Once this occurs, the aim is that the systems, processes and allied culture are able to buffer the destabilising impact of significant leadership changes on the organisation as a whole.

GM D illustrates the patience within the organisation to allow new initiatives to become embedded and says, "It took…to get a model approach integrated in here for amateur scouting, which was not integrated, it took us a year. To build that, it took three…and I wasn't here for the first two years of building, so there was some building going on, but it wasn't integrated…In [my former organisation], taking that model based approach, they're still struggling - it's still not there, for a myriad of different reasons, but it took closer to five. And a lot of that, is because they were first. But integrating something that is more of a system, and less driven by - everything's driven by people. The model is a good example, if you're adding a performance services department, I would expect this to not fully be integrated for another year. But the process to decide to do it and to have an orientation, to have an introduction, to introduce our leaders to every single one of our players, to roll out with presentations and seminars on explaining the reasons why, that takes 2-3 months. But for a full integration, it's more years". The organisation has openly declared that there is a ten-year development plan in place to support the review of services at all levels of the organisation, and that the evolution of the change process is not tied to short term results. This is further illustrated by GM D's observations that, "Player development, high performance has started a process to do that. We're not there in amateur and international scouting. We're not there with our major league team. But it's just more having a process, driven by our values, that gives people more opportunity for growth, more honest feedback…you're setting yourself apart through doing that systematically. I think very few people are doing it, especially in North American professional sports. We will do it; we are two fifths of the way there."

5.4.3 Macro Perspectives of Change Management

The macro perspectives discussed in the interviews, considered to affect the outcome of change initiatives, centred around the relationships between the sporting directors and the owners or major stakeholders, in addition to what extent resistance was a factor in the organisational environment.

GM B and GM C identify communication with ownership or key stakeholders as a critical part of their daily role. This relates to the buy-in that ownership has in all aspects of operations, including adopting change initiatives, and sharing the overall vision and direction of the organisation, irrespective of short-term results.

GM B states, "I have constant contact with the owner, every single day. He's involved in the picture…I also have presentation that I put together for the owner when he came onboard - what is a GM and what are my roles and responsibilities. He was very clear on what I needed to do…I think a lot of it is the owner relationship. Do they understand the vision? Do they believe in the vision? Do they feel connected to the vision? I think that is always, within every professional club, very important. Because ultimately, it's their child, it's their baby and they need to be proud of it - that's what represents them and they're investing a lot of money. So, a lot of interaction, you know, some of the things that I haven't shared, I have a lot of interaction with the owner, which by and large is a major positive…I think, the more that we've communicated with the owner, the more that we've explained, the more that we've shown how much we're invested, the more he's willing to invest and it's being reciprocated".

GM C shares a similar viewpoint, "My job is about servicing relationships…typically, the relationships that write cheques for our organisation, and in particular, the rugby department. So we have three or four major agencies, or partners, that support us financially and they require a significant amount of servicing to ensure they are informed of why things are going well, or why they are not going well…at the moment, it's mostly not going well, in various areas. So, it's making sure they are clear and understand why things are occurring and what we're going to do about it, to ensure that investment stays at the table. That's a big challenge for us and we do a pretty good job of that, I have to say. We're having a really tough time with our [key senior programme] at the moment. Other aspects of our organisation are going incredibly well, so whilst you see the public pressure or public criticism of an area, deep down, because of the relationships we have with our major partners, there's no concern on their part and they understand and know what we are trying to achieve. So, it's less stressful. That's a really big part for us and myself and our CEO spend, probably, 85 percent of our time, focusing on those particular partners and those relationships".

GM B suggests that this alignment and collaboration between ownership and sporting director is central to managing internal resistance, "Culture, philosophy, he helps drive it…
When it comes down to the nuances of the sport and the positional requirements, he has a brand that he wants people to love and fall in love with and be excited by. That drives some of the playing principles and the philosophy, but again, it's very holistic and saying, there's a lot of people that believe in it and we are all going in the same direction. But, I think, a lot of the let down in professional clubs, is folks doing it the way that they think it should be done and not representing the ownership".

In contrast, whilst the relationship between GM A and the ownership to whom he directly reported was not described negatively, the manner in which ownership directly drove change initiatives, created challenging pockets of resistance in the organisation, that they did not foresee.

GM A recalls, "I think on their part… 'if this is going to help us, everybody should be accepting of it'. Because that's how they are, that's one of the good things about them, if they see something that's at the forefront of helping their athletes, or their organisation get to the ultimate goal of winning a championship and we can be the first to do it, they're all for it…And again it's that protectionism, the different agendas, that they haven't been around sports long enough to know that, that's something you have to really consider when you're bringing in new personnel or new ideas". GM A continues, "99% of the new…came from recommendations from [the owners]. So, at that time everybody was 'well, if the Ownership wants it, we're going to go fully-fledged in it'…A little scepticism, and a little 'it doesn't matter what I think, the bosses want it, so let's try to do it', but you're going to have that little resistance".

GM A relates the implementation of change initiatives by ownership, to the resistance that initiatives faced, from within the organisation, "if someone is trying to say, 'I'm going to keep my little island and be the captain of my island. Anything that I don't like, I don't like it, it's not working'…you're behind the eight ball again, because you don't have the time, if they're resistant, they're not going to buy in, help truly implement what you're trying to do and give it enough time, so you can see if you can get results.

So, that at the root of it all, that's the biggest issue, when you're trying to do something new and innovative in an organisation, people are just trying to protect their turf. If they don't buy in right off the bat, you have no chance".

GM D, meanwhile, reports to the CEO of the organisation, who is given significant autonomy by the ownership group's board to set the vision and direction that the organisation is working towards. Having worked together at a previous organisation and being brought to his current role by the CEO, they enjoy a close working relationship, are well aligned in the direction the organisation is going, enjoy strong communication and have set clear boundaries of accountability and responsibility. Given that in the early stages of the transition, many of the change initiatives have been introduced by members of the senior leadership team, the resistance encountered from within the organisation is not unlike that encountered by GM A. However, whilst long-established employees are acting in opposition, the fact that the organisation is working to manage change initiatives in line with the emerging culture and allied to embryonic systems and processes, means that they are able to observe the resistance from a more dispassionate perspective. This allows them to stay the course and prevent dissenters from derailing change initiatives.

GM D suggests that resistance to the change and evolution occurring throughout the organisation was expected, "So…having math and…being able to use regression analysis to help start with that is a great process but what happens, is people feel threatened…and feel that their power, or influence, or opinion is less powerful.

One because it's change, and two because they don't completely understand how it's valuing information. So, prior to that happening, now people get… 'upset', disappointed, with the model-based decision making. Five years ago, for some organisations, ten years ago for others, they were upset with the fact that magnets were falling off the wall and someone forgot what was said, or they were upset with that the West Coast influence was stronger than the East Coast influence, because the GM preferred the West Coast scout…people talk about insecurities or feeling threatened as such a negative thing, but it's actually just a human thing. That is the same as this is becoming integrated, people are threatened and intimidated by it, either because it's not fully understood, or they feel like it's decreasing influence".

GM E reports to the general secretary of the sport's national governing body, and as such, the nature of his responsibilities does not involve having to interact or develop relationships with external stakeholders. As such, the only resistance that has to be managed in relation to introducing change initiatives is from the head coach and to a lesser extent the players. GM E explains, "Some of the challenges would probably be the old mentalities, depending on the coaches…I am on my ninth head coach. You have coaches that are, 'old school', and may not believe in the importance of these innovations, technologies or advancements, then there are those who believe very strongly in it and embrace it…the philosophies or beliefs of the head coach, have a lot to do with how it's embraced and supported". This comment suggests GM E operates in an environment whereby change occurs along the lines of the punctuated equilibrium model.

5.5 Discussion

The study aims to ascertain the contribution that micro perspectives, meso perspectives and macro perspectives have in influencing the type of change deemed most desirable, the methods subsequently employed by GMs and the outcomes evaluated by those driving change in the organisation. The results compiled from the semi-structured interviews identify clear themes aligned to micro, meso and macro perspectives that affect the outcome of change initiatives in a variety of professional sporting environments (Al-Haddad & Kotnour, 2015).

5.5.1 Micro Perspectives of Change Management

The micro perspectives discussed by each of the subjects relate to the identity of the change leaders and the mindset of the change leaders within the organisations (Vakola, 2013).

All of the leaders interviewed demonstrate a personal tendency towards a growth mindset, where each is open to learning from others within the organisation, as well as looking to external sources for inspiration and innovative ideas. Of the organisations, two are portrayed as displaying a predominantly growth mindset at all levels of the organisation and actively encouraging group-led change throughout each aspect of the operation (GMs B and C).

Another two of the organisations have pockets of politically influential derailers, who are seen to oppose change initiatives driven by ownership or leadership groups. Of these, one organisation is working hard to instil a clear culture driven by shared values and standards and is working towards an environment where group-led change will become more prevalent (GM D). However, there is an awareness that the current internal level of knowledge is limited.

In contrast, the other organisation seems less cohesive in its direction and there does not seem to be a clear pathway to evolve the means by which change initiatives are driven (GM A). The final organisation seems to be established in the model of introducing change through senior leadership and, whilst the changes implemented seem to be more reactive in nature, this may reflect the more isolated environment in which the subject works (GM E).

It is apparent that group-led change is deemed desirable by all subjects, and, in environments that are more evolved in their development, this is effective. This may be due to greater levels of trust between each level of the operation, a vision shared by each employee, agreed standards of practice that hold each member accountable to the organisation and a desire to see change initiatives primarily benefit the organisation.

In environments that exhibit transience in the working population, are less established, or are still in the early stages of a significant change in direction, group-led change is less practical. This is particularly worth noting in light of the increased rates of turnover in senior leadership positions, such as head coaching roles, as noted in section 5.2 (League Managers Association, 2016). This may be due to: a lack of stability amongst less senior roles; insufficient awareness or knowledge within the organisation; a lack of understanding of the need for change by established employees (Nadler & Tushman, 2009); lack of readiness for change (Armenakis et al., 1999); or a scepticism of leadership, shared by certain politically influential individuals demonstrating a fixed mindset in regard to change.

This scepticism may be rooted in insecurity related to personal roles in contributing to a vision that is not well communicated (Jansen, 2004) or not shared, thus precipitating protectionist behaviour (Houkes et al., 2001), as individuals become determined to derail initiatives not perceived as being personally beneficial (Lines, 2005).

5.5.2 Meso Perspectives of Change Management

The meso perspectives discussed throughout the interviews relate to establishing operating frameworks that are underpinned by clear structures, systems and processes; the role of employing evidence-based research in driving change initiatives and the existence of an identifiable culture demonstrating a philosophy and values to support change.

The two organisations that demonstrate sustained records of success under the stewardship of their current sporting directors (in terms of championships won by teams within the organisation, number of end of season play-offs rounds reached, or major championships qualified for), have foundations built on clear structures, that follow defined systems and processes at all levels of the organisation. These foundations support identifiable cultures that promote shared accountability, personal responsibility for individual actions, high standards of behaviour that support a shared vision and relate to shared values that promote the growth of the team and the individual. The respective GMs, B and C, explain that by creating this type of environment, the perception of success in the evolution of the organisation, is not dependant on the outcome of short-term results. As such, the change initiatives are proactive, as opposed to reactive in nature and thus, less destabilising for the employees (Elias, 2009).

These approaches to proactive change are also supported by the available scientific evidence; strategic planning; distributed ownership; shared control and facilitated data collection; and subsequent objective audit. Such aspects support employees in coping with organisational change (Kouzes & Posner, 2017). Whilst suggesting that this method has contributed significantly to the sustained successes of the respective organisations is logical, it must be considered that early successes may have permitted a patient approach to persevering with the change initiatives, that may not have been possible had short term results been consistently poor.

In contrast, the two organisations that have consistently missed out on qualifying for play-off rounds of their championship or qualifying for major championships, display more fluid personnel structures and greater staff turnover (GMs A and E). Systems and processes appear to be less prominent in guiding and supporting these operations, whilst change initiatives appear to be introduced on a more reactive and isolated basis, generally appearing to be proposed by individual members of senior leadership or ownership, as opposed to being collaborative in nature. Cultures within these organisations also seem to be less clearly defined, appearing to mirror the culture of the sports, as opposed to being unique to the organisation and reflecting the shared values and philosophies of the employees.

Research suggests that implementing change processes from top down, without addressing the psychological impact on employees further down the organisational structure, can result in subsequent feelings of stress and cynicism (Reichers et al., 1997). This supports the observations of GM A in relation to employees' disenfranchised views of ownership-led change initiatives.

Such employee perceptions have been shown to reduce organisational commitment (Amabile et al., 1994), job satisfaction, trust in the organisation, belief in the change initiatives introduced (Heyden et al., 2017) and motivation (Rush et al., 1995) and might contribute to the protectionist behaviour witnessed by GM A.

GM D describes an organisation that is working hard to build the foundations of a clear organisational structure, with operations being guided by embryonic systems and processes, that are constantly being introduced and refined throughout the organisation. Shared values have been identified through employee survey and these are being used to guide the development of a distinct culture that is unique to the organisation.

Whilst these systems and processes are being used to guide change initiatives, supported by evidence-based science and data analytics, given the developmental stage of the organisational transition, much of the change is driven by senior leadership with experience of driving similar transitions in other organisations. Consequently, there are pockets of resistance, potentially caused by employees who lack the motivation or awareness to support the change processes that affect their roles and responsibilities (D. J. Paper et al., 2001). However, the change leaders have ownership support and the success of the change initiatives is not being linked to short term results on the field, which have been inconsistent since the transition period was undertaken.

5.5.3 Macro Perspectives of Change Management

The macro perspectives of change addressed in the interviews, relate to organisational resistance and the relationship between ownership or senior stakeholders and the change leaders within the organisation.

The organisations that display a patient approach to executing change initiatives, are those that exhibit the greatest degree of interaction between ownership or major stakeholders and the change leaders responsible for implementing change in the organisation. There is a well communicated shared vision between both parties, thus ensuring a common understanding as to the process involved (research, implementation and integration), specific roles and responsibilities, as well as expected outcomes (Jansen, 2004; Kotter, 1996).

In contrast, the organisation whose ownership is generally responsible for introducing the majority of change initiatives, often without involving top management in the identification and research thereof, demonstrates much less tolerance and patience in supporting initiatives to succeed. The vision of the organisation is less clearly communicated, and the direction taken, in relation to various aspects of operations, is often changed during the implementation phase of an initiative. As a result, a lack of clear direction from ownership and failure to generate support throughout the organisation, seems to result in greater resistance, as employees are neither united behind a vision nor feel they have much control over their fate (Judge et al., 1998). Subsequently, people are more likely to engage in self-serving behaviour, that jeopardises the success of change initiatives (Piderit, 2000).

From the interviews conducted, it is apparent that environments demonstrating emergent approaches to change would not benefit from the same conceptual approach to change management as those environments where a punctuated equilibrium model of change is dominant. This is because some of the micro perspectives that affect the outcome of change initiatives vary between the environments. In an organisation displaying an emergent model of change, whilst it is advantageous for the change leaders to demonstrate a growth mindset, the experience and knowledge within the organisation might prohibit effective group-led change and as a result, the initiatives often have to be driven from top down. Contrastingly, in a more established organisation, where a punctuated equilibrium model of change is exhibited, group-led change increases employee engagement and investment in supporting the process of change. The meso and macro perspectives, however, should ideally remain consistent if change initiatives are to be successful.

These findings are summarised in Table 5.3 and contribute to the proposed conceptual frameworks that illustrate the key micro, meso and macro perspectives that contribute to successful change initiatives.

Table 5.3 Summary of key micro, meso and macro perspectives of change management required for influencing successful change initiatives in North American HPSOs

MICRO PERSPECTIVES	MESO PERSPECTIVES	MACRO PERSPECTIVES
PUNCTUATED EQUILIBRIUM CHANGE • Group Led Change • Growth Mindset in Organisation EMERGENT CHANGE • Senior Leadership Led Change • Growth Mindset in Organisation	• Systems & Processes Guide Each Step of Change Identification, Planning, Implementation/ Integration & Audit • Change Ideally Supported by Evidence and Regression Analysis • Culture & Philosophy Underpin Nature of Change Initiative	• Frequent Communication Between Ownership/Major Stakeholders and Change Leaders to Create a Shared Vision, Understanding of Process, Roles & Responsibilities & Expectations • Organisation-Wide Communication & Ownership of Change Initiatives to Minimise Organisational Resistance

Whilst the findings clearly identify the various key perspectives that contribute to the successful outcome of change initiatives, given the qualitative nature of the data, it is not possible to attribute a weighting to the value each perspective represents in achieving a successful outcome. Furthermore, qualitative data that is collected from individuals (in this instance GMs) operating in unique groups (in this instance different North American HPSOs) prevents an objective comparison and relative evaluation of which individual approaches resulted in outcomes that could be ranked as more or less successful than their counterparts. Instead, the aim of qualitative research is to identify the themes that are shown to have influence in the outcome and explore each participants' relationship to those perspectives.

5.5.4 Conceptual Models

Figure 5.1 and Figure 5.2 outline the conceptual models that have been formulated following analysis of the results of the five interviews. These illustrate the key micro, meso and macro perspectives of change management that contribute to successful change initiatives in North American HPSOs, whose environments display either a punctuated equilibrium model of change (Figure 5.1) or an emergent model of change (Figure 5.2).

Figure 5.1 Key micro, meso and macro perspectives of change management influencing successful change in North American HPSOs demonstrating punctuated equilibrium change
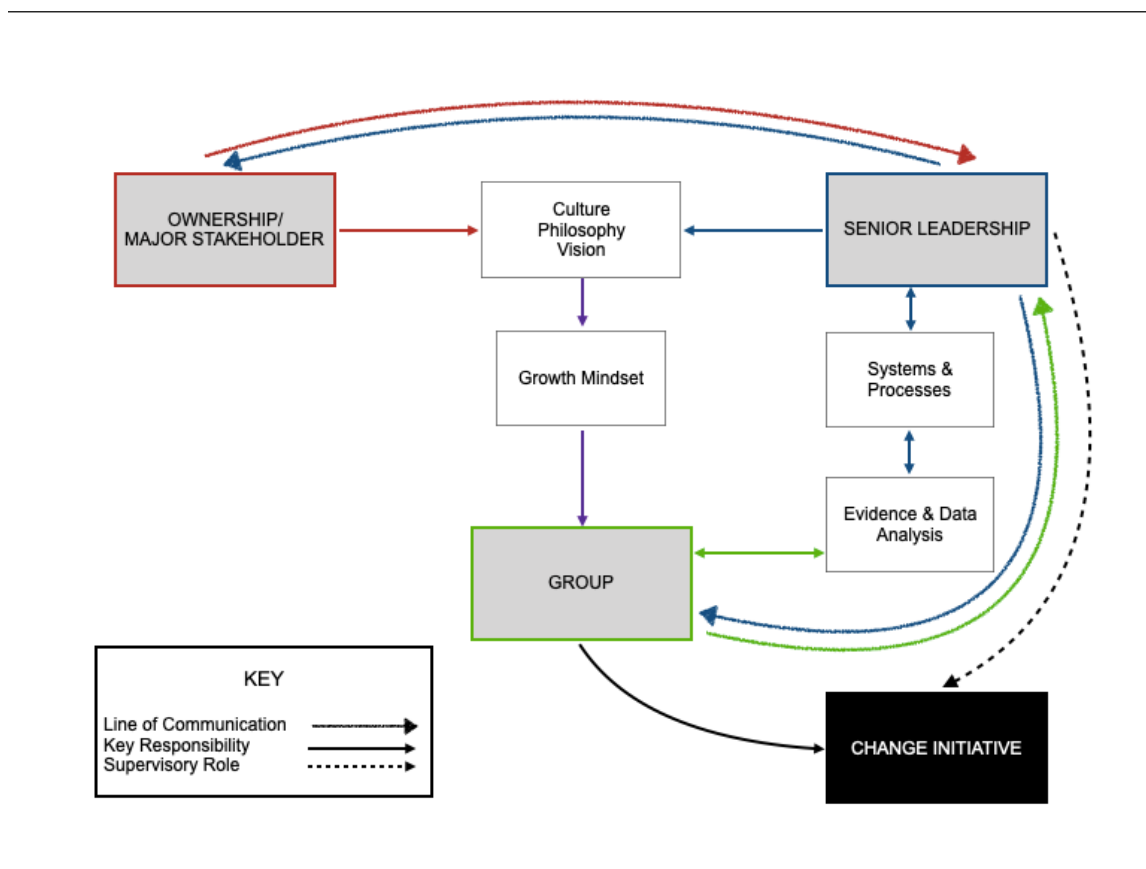
Figure 5.2 Key micro, meso and macro perspectives of change management influencing successful change in North American HPSOs demonstrating emergent change
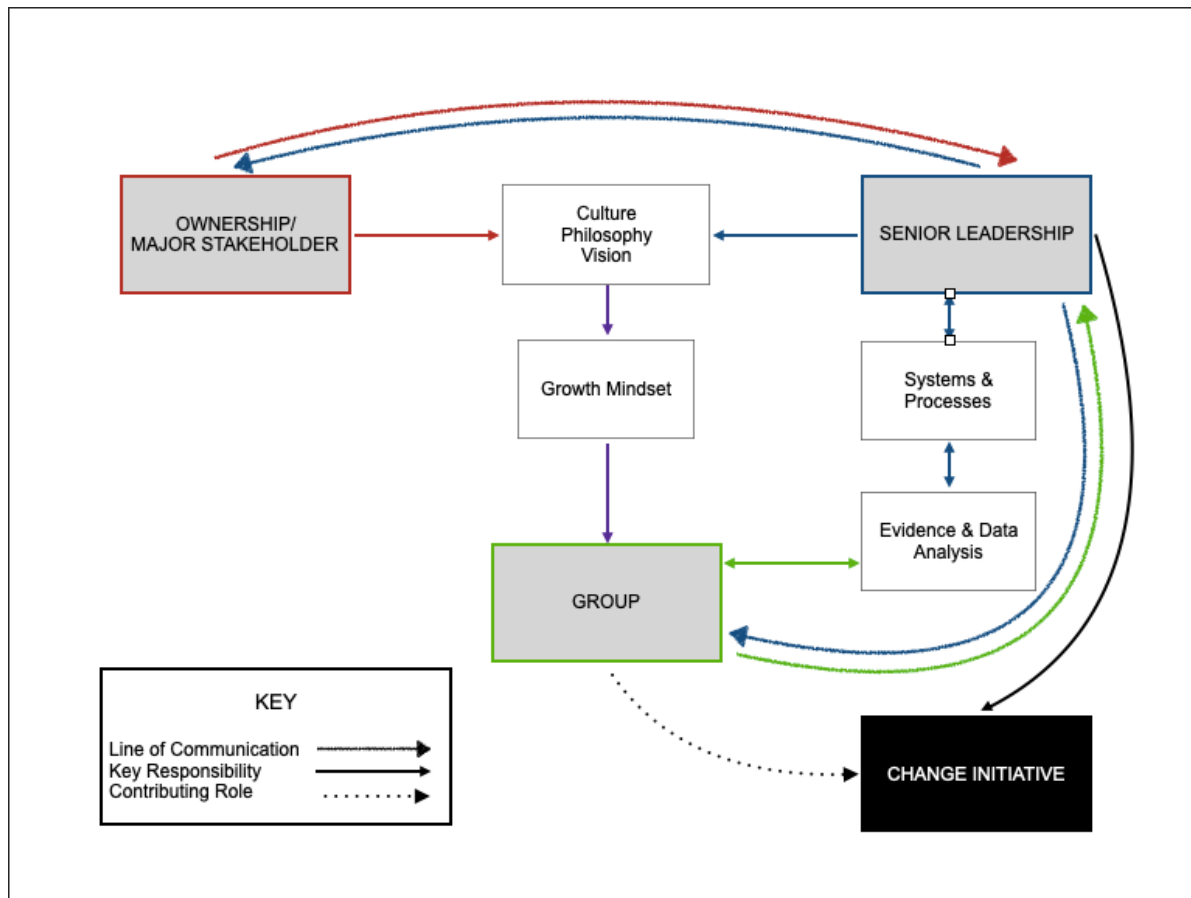
It should be reiterated that, given the complex factors that can contribute to successfully planning, implementing and integrating a change initiative, adopting a conceptual framework is more appropriate than a theoretical framework, as various theories that have been considered throughout this study (Green, 2014; Parahoo, 2014). Furthermore, whilst these conceptual frameworks reflect the findings of the results of the investigation, it must be remembered that, the identification of these perspectives, highlights themes that contribute to the successful outcomes of change initiatives, as opposed to distinct steps that should be followed in the process.

It is recognised that organisations vary in their structures, systems, strategies, aims and objectives, markers of success, human and financial resource, each of which influence how appropriate certain approaches to change may be (Burnes, 1996). Thus, whilst the inclusion of these themes was assumed to contribute to the success of change initiatives in some of the environments within which the subjects operated, these may not be as effective if implemented in other organisations. Furthermore, in identifying themes that were absent in organisations demonstrating less successful or less progressive change initiatives, their inclusion in the conceptual frameworks, is no guarantee that they would have caused alternative outcomes if they had been implemented in these environments. Change is recognised as being extremely complex and there may have been many other factors that negatively affected the change processes in some of the environments investigated in the interviews.

As stated in the literature review, it is important to link the type of change required, to the methods employed to achieve change and the outcomes the initiative is looking to attain, as opposed to looking to identify a "silver bullet" solution that fits all situations (Al-Haddad & Kotnour, 2015). Based on the evidence collated in the interviews, it has been assumed that some of the organisations demonstrated a predominantly emergent model of change (Tsoukas & Chia, 2002), whilst others demonstrated a predominantly punctuated equilibrium model of change (Romanelli & Tushman, 1994). However, change is never uniform and nor are the events that play out on a daily basis in different areas of operations in HPSOs. As such, no team will purely conform to one theoretical model of change.

Given the relative influence and power that owners have, in comparison to that imparted by other major stakeholders and the variance in scope of influence exerted by different GMs, it is also difficult to directly compare the demands of change in professional sports organisations with those in governing body sports organisations. For example, two GMs reported to one majority owner (GMs A and B), one reported to a CEO, who in turn reported to the Board of a large company (GM D) and two reported to the boards of their respective governing bodies and had to consider major stakeholders in the form of funding bodies and sponsors (GMs C and E). Further, whilst some of the subjects interviewed were responsible for numerous teams, across different sites, playing in different leagues and age groups, others were responsible for just one team.

Two sporting directors were responsible for teams overseen by their national governing bodies, where players are contracted by professional teams and spend more time in those environments than with the governing bodies and staff involvement can also be more itinerant in these situations.

It is interesting to consider the cultural differences amongst the cohort, with two of the subjects having been born, raised and involved in sport outside of North America (GMs B and C). With such a small experimental population, it is not possible to ascertain whether their bias towards employing structures, systems and processes more stringently than the other subjects, was a matter of cultural or educational founding, or whether it was just coincidental.

5.5.5 Strengths and Limitations

The research conducted has both methodological strengths and limitations that need to be acknowledged.

By conducting the investigation using GMs, as opposed to departmental leads, coaches or athletes, the interviews were able to gain insight from individuals that have the greatest direct influence over most operational sectors within an organisation. Whilst it could reasonably be argued that their elevated perspective may prevent them from being made aware of some of the daily issues playing out on the ground ,and receive filtered perspectives by those more concerned with self-preservation as opposed to relating the real world view, GMs are usually made aware of all significant change initiatives, across the majority of departments and have the responsibility of ultimately supporting those directly undertaking change initiatives. This population is also extremely underrepresented in the change management and sport psychology literature.

Additionally, by nature of employing semi-structured interviews as the means of data collection, the subjects were able to voice their opinions freely, guiding the interviews as appropriate, whilst maintaining their anonymity at all times. It was also apparent in several of the interviews, that the opportunity to discuss areas of change management with a third party from outside of their organisation or competitive field, was affording the subjects an opportunity to reflect on their experiences and consider their opinions, free from external judgement.

The obvious limitation of the study is that only 5 subjects were interviewed, and the spread of sports represented prevented intra-sport comparisons. The fact that 2 subjects were not native North Americans also made it difficult to identify culturally unique traits of a "North American" GM, operating in HPSOs. Future research should include a greater number of subjects, with several operating in the same sport and from more traditional North American backgrounds, as well as from teams in sports around the world. This would then enable a more informative comparison against counterparts operating in different environments and cultures.

A further limitation of this investigation concerns the methodological design, as the interviews canvas personal opinion and perception of factors influencing change management. As such, it is not possible to draw causative conclusions to ascertain to what extent each perspective influenced the factors responsible for the success or failure of change initiatives. By combining semi-structured interviews with alternative data collection and analysis techniques, it would be possible to more rigorously test the relationship between the various micro, meso and macros perspectives of change management, that affect the outcomes observed in relation to the management of specific change initiatives.

By limiting the research to one stratum of HPSOs, it is not possible to understand the interactions between different levels of management, nor is it possible to identify where change initiatives fail within an organisation. Whilst the current methodology was appropriate for gaining an understanding of the perceptions and opinions of GMs towards change management, future research should collect data from different individuals representing a variety of roles and responsibilities within the same organisation.

This would facilitate an understanding of the range of factors at play in initiating operational change in different departments. Such an approach would also help gain an understanding of the impact various leadership qualities have on shaping the attitudes and behaviours of employees towards the identification, research, implementation, integration and evaluation of change initiatives.

5.6 Conclusion

Managing change initiatives in HPSOs is a highly complex, risky and potentially costly endeavour but one that is significantly under researched (Jacobs et al., 2013). However, given the modern day pressures that impact the ownership, stakeholders and leaders of HPSOs, organisational change has become a constant condition of operation, either in alignment with the emergent approach to change or a punctuated equilibrium approach to change (Burnes, 2004; Romanelli & Tushman, 1994; Tsoukas & Chia, 2002).

This study has investigated the micro, meso and macro perspectives of change that are considered to influence the factors that determine the outcomes of change management by GMs in North American HPSOs. These perspectives address leadership qualities, including having a growth mindset; the construction of structures, systems and processes to guide evidence-based change; and the ability to create and communicate a vision, culture and philosophy both to ownership, major stakeholders, and employees at other structural levels within an organisation. In addition, the onus on the organisation to support group-led change and effectively manage pockets of organisational resistance, in the form of derailers, is included.

Findings emerging from this study are important for increasing the understanding of which

factors contribute to achieving successful outcomes, when undertaking change initiatives in

North American HPSOs.

Chapter 6: Investigating the Change Management Process in HPSOs

6.1 Introduction

The previous chapter investigated the micro, meso and macro perspectives affecting change management in North American HPSOs. The results demonstrated that, whilst meso and macro perspectives were the same in organisations demonstrating bias towards a model of emergent change, as in those with a bias towards a model of punctuated equilibrium, the micro perspectives were different.

The results informed the construction of a conceptual model of change in HPSOs and argued that in organisations displaying an emergent model of change, whilst it is advantageous for change leaders to demonstrate a growth mindset, the experience and knowledge within the organisation might prohibit effective group-led change. Consequently, the initiatives often have to be driven from top down. In contrast, in more established organisations, where a punctuated equilibrium model of change is exhibited, group-led change increases employee engagement and investment in supporting the process of change.

Given that the previous study only explored the micro, meso and macro perspectives affecting change management in North American HPSOs, there was an interest to see whether similar results would be found when investigating the same perspectives in HPSOs from other parts of the World. Additionally, given that some of the GMs interviewed in the previous study had mentioned the influence of their CEOs and boards in shaping aspects of the change management process, it was decided that including subjects that held these roles would be of value.

6.1.1 Aims and Objectives

The aim of this study is to investigate the processes of organisational change management that occur in the HPSOs competing in some of the most popular professional sports in the world and seek to ascertain the contribution that the micro perspectives, meso perspectives and macro perspectives of change management have in influencing the type of change deemed most desirable.

Through qualitative methods, accessing leaders in professional and elite sport, this study will provide empirical insights that inform both theoretical and applied understanding related to change management. In achieving the aim of this study, the objectives will be to:

1) identify how CEOs/presidents (CEOs) and general managers/sporting directors (GMs) identify, research and strategise change initiatives;

2) explore the process of change in relation to planning, challenges of implementation and integration, and barriers to success;

3) establish how change is measured, audited and evaluated;

4) provide a number of recommendations for i) applied practice for and ii) research with CEOs and GMs.

6.2 Method

Given the findings in the current literature and the conceptual framework proposed in the previous study, this research will evaluate three key factors that contribute to change in HPSOs.

The contribution that the micro perspectives, meso perspectives and macro perspectives have in influencing the type of change deemed most desirable; the methods that are subsequently employed by CEOs and GMs in their roles as critical decision makers in the change process; and the outcomes sought and evaluated by those driving change in the organisation, will all be scrutinised.

6.2.1 Design

As with the previous study, the methodological design favoured a qualitative approach to data collection, in the form of a semi-structured interview method, which enabled a reciprocity between the interviewer and participant (Galletta & Cross, 2013; Holloway & Galvin, 2017; Kallio et al., 2016).

Once the interviews had been recorded, data were transcribed and examined through thematic analysis, from which a framework of patterned responses relevant to the inquiry was identified through coded data points, in line with the 6-step method of thematic analysis, as previously described (Braun & Clarke, 2006).

6.2.2 Participants

A purposive sampling technique was employed to recruit subjects with first-hand knowledge and experience of operating in the environment identified in the study's aims and objectives. The selection criterion stipulated that subjects had to be either a CEO, president, current sporting director or general manager of a professional sports franchise or governing body or held that role within 4 months of participating in the interview.

The sample consisted of 8 general managers or sporting directors (8 males), aged between 40 and 52 years (M = 46.38, SD = 3.81), and 5 CEOs or presidents (5 males), aged between 44 and 64 years (M = 55, SD = 7.21). The participants had worked in professional sport, in a non-playing capacity, for between 10 and 34 years (M = 23.46, SD = 6.83) and had served in their current role for between 2 and 18 years (M = 6.15, SD = 4.49).

Table 6.1 Demographic of respondents

		RANGE (YEARS)	MEAN (YEARS)	STANDARD DEVIATION (YEARS)
Sporting Director/General Manager	Age	40 - 52	46.38	3.81
	Years in Sport (Non-Playing)	10 - 30	22.25	6.12
	Years in Role	2 - 18	5.38	5.12
President/CEO	Age	44 - 64	52	7.21
	Years in Sport (Non-Playing)	12 - 34	25.4	8.06
	Years in Role	3 - 12	7.4	2.87
Total Cohort	Age	40 - 64	48.23	6.94
	Years in Sport (Non-Playing)	10 - 34	23.46	6.83
	Years in Role	2 - 18	6.15	4.49

The study sought to understand the perspectives that contribute to change management in HPSOs in a variety of environmental settings, thus of the 13 participants, New Zealand and USA had 3 representatives, Canada 2, Great Britain 4 and Australia had one.

Interviewees came from a variety of sporting backgrounds, with teams represented from the NFL (1), the NBA (1), MLB (1), international cricket (1), Premiership, Super Rugby and international rugby (4), EPL, Football League Championship, MLS and international football (4).

6.2.3 Ethics

A proposal outlining the intended methodology, which included a participant information form (Scahill, 2015) and a participant consent form (Stanford University, 2016) was submitted for ethics approval. The research proposal was reviewed and granted ethics approval by the University of British Columbia's BREB, following completion of an ethics risk assessment, in accordance with their research governance policies and procedures.

6.2.4 Interview Guide

To investigate the purpose of this study, a four-phase interview guide was structured, which remained unchanged from the previous study (Abrell-Vogel & Rowold, 2014; Armenakis et al., 1993, 1999; Gilmore & Sillince, 2014; Jansen, 2004; D. Paper & Chang, 2005; Parahoo, 2014; Rafferty & Jimmieson, 2017; Sikdar & Payyazhi, 2014).

The interview framework was used to guide the interviewer on the topics to be considered and the information to be covered. However, the interviewer could dictate how the questions were phrased and how the themes were linked, in order to enable a flow to the conversation.

6.2.5 Data Analysis and Representation

The interviews, ranging in duration from 33 to 76 minutes ($M = 58.92$, $SD = 12.85$), were digitally recorded in their entirety and transcribed verbatim. A pseudonym was used to identify each participant and all dialogue containing identifiable information, relating to individuals or organisations, was anonymised.

Thematic analysis was then conducted, as per the previous study, to answer the research questions and form the basis of the discussion, in reference to emergent themes identified in the literature (Al-Haddad & Kotnour, 2015; Braun & Clarke, 2006; Burnes, 1996; Lincoln & Guba, 1985; Pettigrew, 1987).

The results were then discussed in turn, in order to challenge the two theoretical frameworks of change in HPSOs, that were proposed in the previous chapter. The first framework was considered appropriate for implementation in environments demonstrating a predominantly emergent model of change and the other deemed appropriate for implementation in environments demonstrating a predominantly punctuated equilibrium model of change (Parahoo, 2014).

6.3 Results

The interviews were undertaken by 13 participants, either currently in role, or having left their role in the last 4 months, as CEO, president, sporting director or general manager at a HPSO. Of the 13 participants, five nationalities were represented, in New Zealand (3), USA (3), Canada (2), Great Britain (4) and Australia (1).

Interviewees came from a variety of sporting backgrounds, with teams from American football (NFL), basketball (NBA), baseball (MLB), international cricket, rugby (Premiership [1], Super Rugby [2] and international rugby [1]), soccer (EPL [1], Football League Championship [1], MLS [2] and international football [1]) each being represented.

Analysis of the semi-structured interviews identified a number of clear themes that are discussed, in reference to factors affecting change initiatives throughout a variety of industries, as reviewed in the change management literature. These are considered against the micro, meso and macro perspectives influencing the outcomes of change initiatives.

Table 6.2 Process evaluation themes and sub themes

OVERARCHING THEMES	THEMATIC SUB THEMES	
Micro Perspectives	i.	Group-led change
	ii.	Mindset of change leaders in organisation (Growth Mindset vs Fixed Mindset)
Meso Perspectives	i.	Bias towards systems, processes & strategic thinking operating framework
	ii.	Role of evidence-based research in driving change
	iii.	Role of culture & philosophy in driving change
Macro Perspectives	i.	Organisational resistance
	ii.	Relationship between owners & senior management in organisation

6.3.1 Micro Perspectives of Change Management

The extent to which employees working in departments undertaking change initiatives contributed to the instigation, management and execution of the project, was discussed throughout the interviews. Organisations predominantly took one of two clearly identifiable approaches taken, which were reflective of their respective cultures.

One approach encouraged staff at all levels to identify gaps in the existing service, or trends that were occurring in the industry, that they would like to see adopted.

Such observations were then brought to a collaborative review process and researched by the most qualified people to evaluate relevance, ascertain feasibility of adoption and assess practicalities of implementation, alongside value to the organisation. This approach welcomed a variety of external expert opinions to guide and support the process where necessary. Interviewees supportive of this approach recognised the expertise of their staff and empowered them to lead in identifying the gaps within the service. Participant K illustrated this point clearly, "My view is that I would expect every single person that works for me, to be better at what they do than I am…my views on how an organisation should be run, is that you should value everybody's opinion…you can't do that without actually talking to them and seeing what ideas are floating around…so, if you've got an environment where everybody could come up with an idea, that idea will go to the head of that particular department, whoever's had it. Whether it's above that department head or below that department head, it will go to the head of department. He'll then use the department to evaluate that".

A multi-disciplinary approach to research also helps to ensure that scientific research and theory will lead to performance results, as highlighted by Participant G, "The primary challenge is converting scientific research into actually making a difference in performance. That transition from what sits in the hands of the scientists, to getting it into everyday behaviours of performance coaches isn't always straightforward. So, there's an issue…about getting the coaches involved at the outset, ensuring that the problem that we're looking to solve has been identified by the coaches".

Once the necessary research has been completed, the decision to execute any significant change initiative is taken in all cases by senior executives, primarily driven by the need for financing. Participant J recognised that as a CEO, his roles were to support departmental staff in driving change management initiatives as well as make finance related decisions, "it's driven from the bottom up, but at the end of the day, facilitated by me and the head coach, we'll end up having to make a call on…what will be the best spend to that dollar to get the best bang for our buck". This course of action is supported by Participant K, who commented, "If it's not within their budget, they'll come to me with a proposal, and say, 'this is the business plan for it; this is what it will cost; this is what we think we can get out of it'. I'll sit with the two other executive board members in the management team and we will make a decision on whether to progress it or not".

In the organisations where this philosophy was prevalent, the consensus was that, once implemented, staff are given the space, structure and time to allow them to work through the integration phase, with communication maintained throughout and support provided as required. Subsequently, each employee is held accountable for their work but is given license to make mistakes and learn from them, to promote evolution and achieve improved future outcomes.

Participant F explained, "You need to give everybody a voice because it can't just be my direct reports, talking to me all the time…I need to hear from the other guys because they could have fantastic ideas about what's happening or what's not right…I go through a process with myself and the board, and myself and my direct reports, and they'd engage the whole team…because if they're going to commit to targets, they want to achieve it as well.

There's got to be stretch in there, so people aren't just doing the same as last year…you need people to be part of the process…understanding how you need each other, and how you can help with targets, and performance and support is pretty important".

The second approach described a 'top down' perspective to change management, with ownership or senior leadership identifying areas of change, as opposed to change being initiated by staff within their departments. Whilst the organisations favouring this approach sought to involve departmental employees at different stages and to different extents, the process of researching the initiative, reviewing the information, planning and staging the implementation was neither structured nor clearly defined. Participant H stated, "More often top down. I'd say that it's a very authoritative regime. And again, I call it old school…[there's] no formal process. A lot of it is budget driven. A lot of it is a function of time…and there really isn't a lot of time", an approach echoed by Participant M, who responded, "no, there is no set process or system for deciding how an initiative is researched".

In addition, the top down approach appears to lead to fragmented research and haphazard planning of change initiatives, as senior managers don't have time to see the projects all the way through, as explained by Participant A, "my main reason, was time constraints…at the start of training camp, when we're trying to implement a sports psychologist, or around the draft time…if I did it again, I would say, 'let's get all the information', and then once it's down-time, when I could pull all my resources, my time, to really develop and devote…".

Thus, resulting implementation can lack departmental cohesion, with support for the initiative and communication from key sponsors absent at roll out, which can lead to significant problems. Participant H described an initiative where the Head of Rehab and Science was replaced and once the new incumbent was introduced "we just let him get on with it…we felt it was best to give him space to work it out…he changed the structure from a flat structure which had worked well, and promoted one of the therapists…unfortunately we lost our long-serving therapist, good guy, but he told us on exit that he felt his career wasn't being best served in the new set-up".

Two organisations, which appeared to be in a transition phase with regards their approach to change management, reported a desire to involve employees at all levels but acknowledged that scant knowledge and experience of some change initiatives internally were currently limiting factors. Both organisations were addressing this with recent appointments in leadership positions but there was an understanding that it would take more time for the systems, processes and cultural changes to be implemented to a level where group-led change would be widely effective.

Participant D explained, "You know [*Performance Director*] is leading that. But ideally, what we would be doing, would be all of those department heads that I just mentioned and the manager, would be involved. And then depending upon the area, there may be other leaders in specific departments, or specific areas of expertise that were involved…include people in the process of determining, deciding why and how you're going to have that philosophy. That's just not always possible, especially in the area of performance services.

It might be more possible in the area of what our pitching philosophy is going to be…but in the area of performance services, a lot of our leaders and decision makers aren't going to have as much experience. It's going to be foreign".

Approaches to how employees are involved in initiating and implementing change initiatives are potentially related to whether or not the HPSO's employees demonstrated a growth mindset. This can be another micro perspective that influences the outcome of a change process. Participants B, C, F, G, I, J, and K all provided examples whereby employees at all levels throughout their organisation openly portray growth mindsets and are actively encouraged to search for best practice and seek opportunities for development.

Each of the 7 participants illustrated their open-minded approach to organisational improvement, similar to Participant I, who stated, "we would always look to see what the best practice was within our sport…within other sports…if it's relevant, we would look to best practice in industry…we're an organisation that takes a lot of pride in learning at every level…regularly hosting visitors here from other sports organisations, other the football teams, other industries. We're regular visitors to other businesses… [*technology company*] … [*F1 team*] … [*finance company*] … [*sportswear manufacturer*]. We are very keen to improve the organisation's wider knowledge of best practice, in whatever field that may be…we have to look for other ways to be smart. If we can gain that advantage through technology or through better systems, better processes, better recruitment, better development of our people, better culture, then we'll always look for ways of doing that".

Participant J reinforces the importance of this approach being integrated in the culture so that people at every level of the organisation are benefiting from developmental support, "one of our biggest investments has been in leadership…we have business mentors, mentoring our leaders and our team…Our coaches have gone out, to mainly Australian sports, AFL and NFL. Part of our leadership program was through the [*U.S. military unit*] program in the states…we obviously have [*national rugby union*] run pretty good games, so we link our event management staff into those, to see how they run an event…our commercial team we're off to Seattle…it's really important that it's not just about the High Performance Team, you've got to make sure that your whole team's getting that opportunity. Just to get out and see what other people are doing and then sometimes reflect…it's important that they get out of their comfort zone and just check these things out".

These 7 interviewees additionally underlined the importance of reflecting on their own practices, taking risks and learning from their mistakes, to underpin organisational improvement. This was illustrated by Participant K, who stated, "The only way to move on pretty quickly is if people own up to mistakes and you treat them as they are, mistakes. It gets rid of all the politics. If you can translate that into a business environment, you get an environment where people are not afraid to have an opinion and they're not afraid to try things. That seems to me the best way to drive innovation".

In contrast, Participants A, H and M demonstrate a personal growth mindset, which is not necessarily shared by others in their organisation or by many in their sport.

Participant H reported several instances of conducting personal research with a number of organisations related to a variety of innovative approaches to performance optimisation. However, he added, "It's a very authoritative regime…old school, so probably less open to innovation than others…there's people who've been around professional basketball for a long time and have had success - they may not be as open to innovation as others…I met with the director of scouting for [*NFL team*], and wrote up a report and had some ideas. They sort of fell on deaf ears. I just got the sense that there wasn't a lot of interest in innovating… some, 'we've done it this way for a long time, and it works, so we keep on doing it', and probably not as open to innovation as we could be".

6.3.2 Meso Perspectives of Change Management

Interrogation of the meso perspectives that have been shown in the literature to influence the outcome of change initiatives, further demonstrates diverse approaches to managing change between organisations, as observed when reviewing themes related to micro perspectives.

It was apparent from the interviews, that the same participants who promoted a team-led approach to change, B, C, F, G, I, J, and K, also placed a greater emphasis on strategic planning. It was evident that the visions laid out in these strategic plans guided the management of change initiatives, which, as with other aspects of operational undertakings, was supported by structures, systems and processes. These were instrumental in creating boundaries, facilitating communication and delineating roles and responsibilities, ensuring each person could then be held accountable.

Participant G explained how his organisation links strategic planning to the decision making process for each person and how it guides the types of change initiatives supported, "It starts with the top of the organisation, having real clarity on its sense of purpose, and what it wants to achieve in the strategic cycle. So, what do we want the outcome to look like? …that then helps define your decision making…and that's aligned across the organisation…the next stage then is to say, 'What are the component factors that we need to consider in order to enable us to, to achieve that goal?'. We then break that down into a number of areas…then somebody gets assigned those responsibilities to go and look at what is best practice in this field. What is possible within this field? What challenges might we have to overcome to be effective in this area? That's basically the process…what that will come down to is, a series of tactics or strategies, tactics and actions that have to have resource alongside. Without resources, it's highly unlikely to achieve those objectives. But we have to match resource alongside those strategies".

Participant I underlined the importance of the strategic plan and the underlying process in ensuring that decisions are not made reactively, in response to the bumps in the road that are inherent to sport, "We had one poor season in my third year with the club, and people said, 'how are you going to change the strategy?'. I said, 'I'm not, we had a poor season, but it's not going to change the strategy because, what we're aiming to do is exactly the same. How we're aiming to do it, is exactly the same'…the one thing we can't control, because we're in a professional sport, is results and athletes perform badly. Athletes have injuries or, for whatever reason, don't hit the standards that they would normally expect to. That then can very quickly knock an organisation off-course. We're not going to allow it to…keep focused and maintain our position. And we did, and since then, we haven't looked back.

You might change one or two things, you review every year, what you've done and how you've done it. And you look for right ways of improving it. But don't it doesn't mean you are changing strategy, it means, you are refining it".

In the other organisations, the short-term goal of winning was seen as more important than underpinning the vision of achieving sustained success through strategic thinking, guided by process. Participant H explained, "winning takes precedence over all of all of these things. I think innovation is a lot harder when we're confronted with the pressures of winning games day to day. I mean we lost last night by 30 points in [*opponent*]…our focus, is this game".

In these environments, the absence of a clear vision, mission or strategic plan promotes a feeling of insecurity and the perception that the only objective markers that owners and senior leaders are judging success by are results. Subsequently, success is judged in the "here and now" as opposed to over time. This emphasis on short-term results over adhering to a trusted process to achieve long-term outcomes is indicative of organisations that are more unsettled and as a result are experiencing continuous, unpredictable change occurring at all times, which is in line with an emergent model of change.

Organisations predisposed to adopting systems and processes when implementing change initiatives also described a formalised research process, involving several internal staff, allied to external consultants and institutions, to create informed, objective cases for adopting initiatives.

Participant D explained, "ideally it's evidence based…we have a concrete reason to be trying [it], it's not always going to be, but ideally there is significant research and evidence, not just ours, behind why we should be using something". Participant G detailed their process, "In our innovation projects, we have a partner university that works with us, so we work quite closely with [*University A]* on some biomech projects. We work with [*University B]* on pressure profiling. We've worked with [*University C]*, and we're trying to set up a project right now with [*University D]*. So we look for the best partner that can help us…When we're convinced there's a compelling case, we put a project team together that will work on that project, we will come up with a hypothesis that we need to test out and we invest resources to accompany that".

This process is reiterated by Participant I, who explained, "We would like to get as much detail as possible, more than one example…look for two or three organisations that perhaps have been through a similar process of change to make sure that we weren't just relying on one source. We'd also look to industry experts outside of the direct example…so our university partners, to give us some guidance, if there were professional bodies that could guide us, we'd look to those as well. We very rarely, if ever, rely on one source, particularly when it comes to changing something in our own organisation and as an organisation, we have a policy of doing things properly".

The interviews demonstrated that the organisations who had sought to create boundaries, understand the importance of communication and delineate roles and responsibilities to promote accountability, had intentionally created environments with clearly defined cultures and philosophies, developed over time.

These cultures were built upon the systems and processes which underpinned each aspect of their operations, including how change initiatives were thoroughly researched, planned and implemented, and drove behaviour of each employee, by setting standards of practise for everyone to adhere to. Participant I reported, "In order to make those decisions on a consistent basis, you've got to give people a framework that they can judge their actions by, and we decided to adopt a series of values for the club. Those guiding principles, those values, accompanied by a clear vision and a very, a very solid mission have enabled us to just keep going over the last, now, coming up ten years, and, achieve what we've achieved."

As such, these environments are more reflective of a punctuated equilibrium model of change, whereby the organisations demonstrate a degree of maturity, with an established culture and supporting a gradual evolution.

Participant B reinforced the general perception of relative stability, which aims to insulate his organisation from episodes of significant change, "the style and the philosophy shouldn't change, individual game day tactics can, but our overall view and the branding of the club has to remain consistent". Participant B explained that this culture is driven from the very top, starting with the owner, "Culture, philosophy, he helps drive it. 100%". He also identified this responsibility as being one of his key roles in the organisation, "Roles and responsibility? Culture, driving the philosophy…overseeing the culture, the philosophy of the club. Driving those two".

There was also a recognition that culture was enhanced by ensuring there was diversity within the organisation, which brought added value and a greater depth of knowledge to the organisation. Participant G recognised, "We have quite a diverse range of players that we're working with, and so to have a diverse workforce is important…from a range of backgrounds. From within [*their sport*] and outside of [*their sport*], from within the [*home country*] and outside of the [*home country*], from a range of ethnic backgrounds, so yes, as diverse a workforce possible…a balance of those two things - that good cultural fit, whilst also recognising that a really diverse mix of styles, backgrounds, preferences, skills, ability of experiences are important". In contrast, the cultures described by Participants A and E, reflected the cultures of the sport in which they operated, as opposed to one unique to the organisation, underpinned by specific values or core behaviours to which each employee was expected to adhere to.

As with the micro perspectives affecting the outcome of change initiatives, Participants D and L described organisations of a transitional nature. There was an obvious understanding of the importance of establishing a clear organisational culture, underpinned by shared values and behaviours, to which everyone is held accountable, in alliance with the systems and processes that are being introduced to drive the organisation in relation to change initiatives. Participant L described how changing the culture was a top priority when he arrived at the club, "there was a massive weight of negativity, pessimism and failure around the place and you could smell it. You could taste it. That legacy of failure was so strong, that it was really paramount, it was the first thing we had to change….within the first two weeks.

It was probably an ongoing process, then for the next year, to change personnel, whether that be playing staff, or support staff, and start developing a culture of positivity, of resonance and winning".

These transitional environments indicate organisations that are currently experiencing continuous and unpredictable change, in line with the emergent model of change. However, their respective missions outline how key structures are being established to create the foundations for a more stable environment, where the punctuated equilibrium model of change is more representative. Once this part of the process has been completed, the strategic plans are in place to have an organisational culture that can buffer the destabilising impact of future significant leadership changes, on their respective HPSOs.

6.3.3 Macro Perspectives of Change Management

The macro perspectives discussed in the interviews, considered to affect the outcome of change initiatives, centred around the relationships between the participants in their roles as CEOs or GMs and the owners or major stakeholders, in addition to what extent resistance was a factor in the organisational environment.

Participants B, C, G, I, J, K and M identified communication with ownership or key stakeholders as a key part of their role, either on a daily basis, or involving conversations several times a week. This relates to the buy-in that ownership has in all aspects of operations, including adopting change initiatives, and sharing the overall vision and direction of the organisation.

Participant M shared strong, communicative relationships with his two majority owners, "the executive group consists of [*the two majority owners*], [*the COO*], [*Director of Football Operations*] and myself, so we meet regularly to discuss all aspects of the operation…the group sets the direction, the philosophy and makes the key decisions, so yes the majority owners are involved with that".

Participant I talked about the trust that his owner has in him to operate as a CEO and the autonomy he is subsequently afforded, "We talk every day…He doesn't have a day to day role in terms of managing anything in the club. He's the owner and he's the chairman. And obviously, ultimately, it's his money that we're playing with. But, he's a great believer in that if you are a chief executive, then the chief executive runs the business and sets the culture and manages the culture and takes the key decisions".

This degree of autonomy is also enjoyed by Participants F and J, whose owners, whilst interested, are described as more "hands off", with Participant J explaining "I would talk to them, some of them daily, some of them weekly, but it's more as a really interested fan than a business thing. One of the guys has a commercial interest as in, he's done a lot of sponsorship and is involved in a number of other clubs. So, business wise I would talk to him more than others about the actual business, otherwise the only time I really talk to them around the business, is those four times [quarterly board meetings]. They don't get involved in the management".

In contrast, Participants A, G and L endure more challenging relationships with owners or majority stakeholders, for a variety of reasons. Participant G explained, "we are going to have to go through a period of change over the next few weeks and months, but it's been externally driven by our board, by our Chief Executive, by the finances of the organisation, and that makes things difficult and tricky…unless we positively influence the key decision makers within the organisation, that's the chief executive and the board chairman, more effectively than we doing currently, then we are constantly going to have to battle those external factors…managing up and those relationships with the chief executive and the chairman are absolutely vital…We have a lack of belief and trust from our board chairman down to us, which is having an influence on our chief executive, which is having an influence on our budget".

Meanwhile, Participant L discussed the impact communication challenges were having in effectively executing in his role, "It's up to the owner, really, whether moving forward he wants to carry on, or he doesn't want to carry on, or what he wants to do...if we can build on last season, then we've got a great chance next season. But that's a big if…there's been a big political changing landscape, to be able to achieve what his vision was. So now we're just waiting to see what's changing now. What is the new vision? What is the new expectation next season? What do we feel is appropriate? What do we feel is achievable? … So last season, we were forever. Because the owner was very motivated, very keen, and was absolutely 100% involved. It was communicating what we were doing with him…and I needed help on that through the CEO. Between us, we managed to get the right proper messages across. Now I've lost the CEO.

We've got his PA over here, who's a young kid, who sometimes things get lost in translation and it is not the easiest…I have no direct line into the owner. I have to go through his PA. So, it could become confusing. It could become difficult. It could be completely different. I don't know yet".

6.4 Discussion

The study aims to ascertain the influence that a variety of micro, meso and macro perspectives have on change initiatives; the methods employed by key decision makers in HPSOs and the outcomes evaluated by change leaders. The results compiled during analysis of the semi-structured interviews identify clear themes aligned to each of the perspectives that significantly influence the outcome of change initiatives in a variety of professional sporting environments around the world.

The micro perspectives discussed by each of the participants are related to group-led change, as well as the mindset of the change leaders and how that is or is not reflected in the wider organisation as a whole.

Every interviewee demonstrated a personal tendency towards a growth mindset, which has been described as believing that talents can be developed through hard work, good strategies and input from others (Dweck, 2017).

Seven of these participants (3 British [1 soccer, 1 rugby, 1 cricket], 3 New Zealanders [1 soccer, 2 rugby] and 1 Australian [rugby]) further demonstrated that they were instrumental in driving an environment that embraced a growth mindset throughout the organisation, which empowered and engaged staff at all levels, whilst providing formalised organisational support for collaborative thinking, risk taking and learning from mistakes. These organisations promoted and actively encouraged group-led change, throughout each aspect of their operation.

However, there were four participants, where the growth mindset of the leaders was not indicative of the culture as a whole within the organisation that they worked. Instead, many of their relationships were with people who displayed a fixed mindset, whereby their belief system was characterised by a sense that talent was more of an innate quality and were therefore less likely to put significant resource or energy into learning. Subsequently, these organisations were portrayed as having pockets of politically influential derailers, who were either directly or indirectly resistant to adopting change initiatives.

Of these, two participants (1 British [soccer], 1 American [baseball]) were actively working to instil a values-based culture, introducing core behaviours that promote accountability and were thus progressing towards an environment where group-led change will become prevalent, as internal knowledge and expertise improves. In contrast, two organisations (1 basketball, 1 American football) appeared less cohesive in their direction, with the participants (2 American) unable to demonstrate a clear pathway to evolve the means by which change initiatives are driven from throughout the workforce, as opposed to the current top down approach.

Two other participants (2 Canadian) portrayed organisations (2 soccer) that were committed to a model of introducing change through senior leadership. They suggested change initiatives were more reactive in nature, whilst following introduction, change leaders acted as passive observers during implementation, with senior management providing minimal guidance at this phase of the change process. Each participant shared the view that group-led change is desirable, and, in environments that are more developmentally evolved, this is effective, contributing positively to each phase of the change management process. This may be due to greater levels of trust between each level within the operation, thus promoting a healthy appetite towards taking risks and learning from failure; a clear and well-communicated vision that conveys a sense of ownership for each employee; agreed standards of behaviour that hold each member accountable to the organisation and a desire to see change initiatives primarily benefit the organisation.

In environments that exhibit transience in the working population; have a more short-term view of how to achieve success; are less established; or are still in the early stages of a significant change in ownership, group-led change is less practical. This may be because of a lack of stability amongst less senior roles; pressure to achieve short term results, as opposed to focusing on reaching long term objectives by following process; insufficient awareness or knowledge within the organisation; or a scepticism of leadership shared by certain politically influential individuals, who demonstrate a fixed mindset in regard to change. This scepticism may be rooted in insecurity regarding personal roles in contributing to a vision that is not necessarily shared, thus precipitating protectionist behaviour (Houkes et al., 2001), as individuals become determined to derail initiatives that are not perceived as being personally beneficial (Lines, 2005).

The meso perspectives discussed throughout the interviews relate to establishing operating frameworks that are guided by strategic thinking and underpinned by clear structures, systems and processes; the role of employing evidence-based research in driving change initiatives and the existence of an identifiable culture demonstrating a philosophy and values to support change.

It is not possible to rank the teams according to markers of success, because, the participants are leading change in teams from different sports, countries and leagues. Given the nature of the data collected and the diversity within the cohort, it is impossible to compare standards of competition, the relative influence that certain factors have in influencing markers of success in each league, or the relative influence that national culture has on organisational culture and outcome, between teams and leagues. However, it is still possible to group participants whose teams appear to be demonstrating markers of sustained success.

From the data, it could be considered that five HPSOs (2 rugby, 1 cricket, 2 soccer) are demonstrating markers of sustained success in line with the objectives outlined by the participants (3 New Zealanders, 2 British), in terms of either championships won by teams within the organisation, number of end of season play-off rounds reached, major championships qualified for, governing body rankings, or league position in relation to budget spend, over the last 5 years. Each of these organisations operate from foundations supported by intentionally formed cultures that promote shared accountability; taking personal responsibility for individual actions; and defined standards of core behaviours that support a shared vision and relate to shared values. Such cultures are deemed to promote the growth of the team and the individual (Hughes, 2018).

The participants concerned, B, F, G, I and J, explained that by creating this type of working environment, the perception of success is focused on the evolution of the organisation and is not dependant on the outcome of short-term results. Consequently, change initiatives are proactive as opposed to reactive in nature and are, therefore, less destabilising for the employees (Elias, 2009).

These examples of proactive change are also more widely researched in relation to available scientific evidence; are strategically planned; distribute ownership; share control and facilitate data collection and subsequent objective audit. Several aspects of this approach to change have been identified as supporting employees in coping with organisational change (Kouzes & Posner, 2017).

Whilst suggesting that this approach to change may have contributed to the organisations achieving sustained success over the last 5 years, it is not possible to attribute causation.

It must further be considered that many factors, such as early successes or financial constraints, may have afforded a patient approach to persevering with change initiatives.

In contrast, four of the organisations whose teams have consistently failed to achieve similar markers of success over the same five year period (1 American football, 1 basketball and 2 soccer), are described by the participants (2 American, 2 Canadian) as having more short term approaches to achieving success and having less of a focus on long term strategic planning. Additionally, systems and processes appeared to be less prominent in guiding the operations.

In each of these organisations, it was apparent that change initiatives were introduced on a more reactive and isolated basis, often instigated by individual members of senior leadership or ownership, as opposed to being collaboratively driven. The cultures within these organisations were portrayed as being less clearly defined or found to have evolved, as opposed to having been created intentionally. These cultures further mirrored the cultures of the respective sports, as opposed to being unique to the independent organisations and thus failed to reflect any shared values, beliefs and behaviours that might have been representative of each HPSO's employees.

The comments made by Participant H, which demonstrate a degree of disenchantment with how change is driven from the top down, are in line with the research, which suggests that the implementation of change processes from top down, without addressing the psychological impact on employees further down the organisational structure, can result in subsequent feelings of stress and cynicism (Reichers et al., 1997). Further studies have shown that such employee perceptions can reduce organisational commitment (Amabile et al., 1994); job satisfaction; trust in the organisation; belief in the change initiatives introduced (Heyden et al., 2017) and motivation (Rush et al., 1995), and might have contributed to some of the protectionist behaviour that Participant A reported in his interview.

Meanwhile, Participants D and L described the progress made by their respective organisations, in building foundations through organisational structures that engage in strategic planning and employ the use of systems and processes to guide operations.

Both individuals reported the intentional development of a distinct culture, unique to their respective organisations and aligned with internally identified shared values, core behaviours and beliefs, with Participant D explaining how these shared values had been identified through an employee survey. Participants D and L both discussed the fact that whilst systems and processes were being used to guide change initiatives supported by evidence-based science and data analytics, given the developmental stage that each organisation's transition was at, much of the change was currently being led by senior leadership figures, who had experience of driving similar transitions in other organisations.

Consequently, both reported pockets of resistance caused by employees who lack the motivation or awareness to support the change processes, when they perceive that their roles and responsibilities are affected. However, the ownership groups of each HPSO have been vocal and visible in their sponsorship of the change leaders and are not linking the success of the change initiatives to short term results on the field, which have proved inconsistent for both teams. Decline in short term results are in line with Kanter's Law, which suggests that "in the middle, everything looks like a failure" and is often described as "the messy middle of change" (Kanter, 2009).

Notably of all 13 interviewees, only Participant G referred to any of the recognised specialist terms, concepts and models of change management that are often discussed in the business literature. He mentioned involving his leadership team "effectively as a guiding coalition…as Kotter talks about".

None of the subjects reported any of their staff receiving formal change management training, personal change plans, nor did any mention that they had conducted change risk analysis; or adopted researched strategies related to increasing the chances of a successful implementation after launch (Hiatt, 2006; Hiatt & Creasey, 2012) or making change initiatives stick through their institutionalisation (Kotter, 2012, 2015).

The macro perspectives of change that are discussed in the interviews are related to organisational resistance and the manner of the relationship that the change leaders within the organisations have with owners or key stakeholders.

It is apparent that the organisations who demonstrate the most patient and cohesive approaches to executing change initiatives, are those who operate in line with a strategic plan, allied to relationships with ownership, or major stakeholders, that exhibit the greatest degree of trust and most transparent communication. These HPSOs enjoy a vision that is shared by both parties and is thoroughly and continually communicated throughout the organisations. This ensures a common understanding as to the process involved (research, implementation and integration), specific roles and responsibilities, and the outcomes that the initiative is expected to achieve. Meanwhile, whilst senior management staff at one HPSO have developed and clearly communicated their strategic plans throughout the organisation, in addition to promoting group-led change initiatives in line with these plans, they still encountered resistance from top executives. On reflection, however, a key failing in their strategy for managing up was identified.

Participant G reflected, "I've spoken to our chief executive a number of times in recent weeks and…we started getting underneath actually what the issue was…one of the mistakes I made is that I over communicated in a style that was my preference and not his preference or what he wants…I was telling him how I was spending his money. What he wanted to know was 'prove to me that [the investment] is making a difference'. So, it feels like we've made a bit of progress". This willingness to reflect and acknowledge the need to improve was indicative of the participant's portrayal of the organisation and provides an insight as to one of the factors that might have contributed to their sustained success achieved in recent years.

In contrast, the organisations whose ownership or executive management teams are generally responsible for instigating the majority of change initiatives, without involving senior management or departmental staff in the identification and research phases, are the most passive in supporting initiatives to succeed and demonstrate less patience in working through the middle of change. It appears that these organisations are less adept at developing strategic plans by which operational developments can be directed and they struggle to clearly communicate a coherent vision for change initiatives across the organisation. Consequently, the direction taken in relation to various aspects of operations, can frequently be confused or changed during the implementation phase of an initiative. This can result in initiatives being poorly monitored or managed, leading to them either being prematurely abandoned or failing to meet their objectives, whilst incurring high resource costs. Therefore, these factors seem to result in greater resistance from employees, as people are not united behind a vision and feel they have little control over their fate (Judge et al., 1998). They are, therefore, more likely to engage in self-serving behaviour, which jeopardises the success of change initiatives (Piderit, 2000).

The findings of the previous study, which investigated change management in North American HPSOs, are supported by the data returned from these interviews, which explore the same areas of practice in comparable organisations in other parts of the world. Specifically, it appears that environments demonstrating emergent approaches to change do not benefit from adopting the same conceptual approach to change management as those environments where a punctuated equilibrium model of change is dominant. The findings of this study corroborate with the assessment that this is because some of the micro perspectives of change management vary between the environments.

Critically, in HPSOs displaying an emergent model of change, whilst it is advantageous for the change leaders to demonstrate a growth mindset, the experience and knowledge within the organisation might prohibit effective group-led change and as a result, change initiatives often have to be driven from top down. In contrast, in more established organisations, where a punctuated equilibrium model of change is exhibited, group-led change increases employee engagement and investment in supporting the process of change.

The results indicate, however, that irrespective of the dominant model of change within an HPSO, the meso and macro perspectives should ideally be consistent if change initiatives are to be successful. These findings are summarised in Table 6.3 and contribute to the proposed conceptual frameworks that illustrate the key micro, meso and macro perspectives that influence successful change initiatives.

Compared to the previous study, these frameworks have been revised slightly, to acknowledge the importance of strategic planning in guiding the direction of an organisation's evolution as a meso perspective required for influencing successful change initiatives.

The results from these interviews suggest that such formal strategic plans create objective boundaries, which guide the nature of the change initiatives considered.

Additionally, they serve to reduce the temptation for deviating from a sound overall plan, during the 'messy middle of change', which can be susceptible to more subjective, reactive and emotional decision-making.

Table 6.3 Summary of key micro, meso and macro perspectives of change management required for influencing successful change initiatives in HPSOs

MICRO PERSPECTIVES	MESO PERSPECTIVES	MACRO PERSPECTIVES
PUNCTUATED EQUILIBRIUM CHANGE • Group led change • Leadership growth mindset is reflected by an openness to change throughout the organisation & from different sources within the organisation EMERGENT CHANGE • Senior leadership led change • Leadership growth mindset that may not be reflected in other areas of the organisation, where other senior leaders might not be open to change from within other areas of the organisation	• Organisational culture underpins nature of change initiative by creating psychologically safe spaces reflecting values & core behaviours, that promote risk taking, innovation, collaboration, accountability, communication • Strategic plans allied to the vision, guided by systems & processes direct each step of change ID, planning, implementation/ integration & audit, which promotes proactive approach to achieving long-term goals as opposed to reacting to short-term results • Change is evidence informed & where possible supported by regression analysis to give objective markers	• Frequent communication between ownership/ major stakeholders & change leaders to share & sponsor the vision, with understanding of process, roles, responsibilities & expectations to ensure patience to navigate the messy middle of change • Organisation-wide communication & ownership of change initiatives to minimise organisational resistance

Analysis of the results from the interviews supports the conceptual models that were previously formulated to describe the micro, meso and macro perspectives that contribute to successful change initiatives in North American HPSOs (illustrated in Figure 5.1 and Figure 5.2). They are deemed to be applicable to HPSOs around the world. In accordance with the research that advises against seeking to identify one solution to change that fits all situations (Al-Haddad & Kotnour, 2015), this study sought to expand upon the findings of the previous chapter, and further understand the various contributing themes. This understanding aims to facilitate an approach that links the type of change required to the methods employed to achieve the change initiative and the expectations of the outcomes sought.

As such, similar assumptions were made whilst interpreting this data set as were made from interpreting the data set in the previous study, in that whilst some of the organisations demonstrated a predominantly emergent model of change, others demonstrated a predominantly punctuated equilibrium model of change. However, as previously discussed, change is never uniform, and behaviour is never completely predictable and as such no team will purely conform to one theoretical model of change.

The cultural differences must be acknowledged in this study, given that the cohort of participants represented 5 different nationalities, operated in 6 different sports, in teams spread across 4 different countries and 11 leagues, whilst fulfilling 4 different roles, each with an array of different roles and responsibilities.

With the size of the experimental population, it is not possible to assess whether any bias towards developing strategic plans, adopting specific structures or employing systems and processes more or less stringently than other participants was influenced by culture, education, experiential exposure or the result of coincidence. Furthermore, 10 of the participants were employed by professional teams, whereas 3 were employed by national governing bodies to oversee team operations. Of the participants employed by professional teams, 5 reported to a majority owner, 4 reported to multiple owners and one reported to a president, who in turn reported into the Board of a large company. Those participants under the employ of national governing bodies operated in environments where players are contracted by professional teams and spend the majority of time in those environments, as opposed to with their national teams and staff involvement can accordingly be more dispersed and itinerant. They reported into the boards of the respective governing bodies and had to consider the viewpoints of influential stakeholders including government representatives, funding bodies and major sponsors.

Given the discrepancy in the relative power and influence exerted by owners of professional sports teams in running their organisations, in comparison to that possessed by individual major stakeholders in governing body organisations, it is not possible to directly compare the demands of change in professional sports organisations with those in governing body sports organisations. In addition, given the variance in scope of influence exerted by different CEOs and GMs, it is also difficult to compare the ultimate influence that each participant has in their respective organisation.

6.4.1 Strengths and Limitations

The research conducted has both methodological strengths and limitations that need to be acknowledged.

By engaging with CEOs and GMs, as opposed to departmental leads, coaches or athletes, the interviews were able to gain insight from individuals that have the greatest direct influence within HPSOs. Whilst not necessarily being responsible for driving all aspects of change within such organisations, these roles are aware of all significant change initiatives, across the majority of departments and have the responsibility of ultimately supporting those directly undertaking the change management. This population is also underrepresented in the change management and sport psychology literature.

Through employing semi-structured interviews as the means of data collection, the subjects were able to voice their opinions freely, guiding the interviews as necessary, whilst maintaining anonymity at all times. It was apparent that in discussing areas of change management with a third party from outside their organisation or competitive field, subjects valued the opportunity to reflect on their experiences and consider their opinions free from external judgement.

The primary limitation of the study is that 13 subjects were interviewed. Thus, the spread of sports represented prevented intra-sport comparisons, the diversity of nationalities of participants and teams represented prevented cultural comparisons and the variety of roles represented prevented comparison of roles.

Future research should include a greater number of subjects, with several operating in the same sport and hailing from similar backgrounds, which would enable a more informative comparison against counterparts operating in different environments and cultures. Additionally, by considering the objective markers of success and collecting further quantitative data in this field, it would be possible to rank the success of teams within league and cross reference this with the approaches to change portrayed in the interviews.

A further limitation of this investigation concerns the methodological design, as the interviews canvas personal opinion and perception of factors influencing change management. As such, it is not possible to draw causative conclusions to ascertain to what extent each perspective influenced the factors responsible for the success or failure of change initiatives. By combining semi-structured interviews with alternative data collection and analysis techniques, more rigorous testing of the relationship between the various micro, meso and macros perspectives that affect change and the outcomes observed in relation to the management of specific change initiatives, would be possible.

By limiting the research to only two strata of HPSOs, and in each case to only one stratum within an individual HPSO, it is not possible to understand the interactions between different levels of management, nor is it possible to identify where change initiatives fail within an organisation.

Whilst the current methodology was appropriate for gaining an understanding of the perceptions and opinions of CEOs and GMs towards change management, future research should collect data from different individuals representing a variety of roles and responsibilities within the same organisation to understand the range of factors at play in initiating operational change in different departments. This would also help gain an understanding as to the impact various leadership qualities have on shaping the attitudes and behaviours of employees towards the identification, research, implementation, integration and evaluation of change initiatives.

6.5 Conclusion

This study has investigated the micro, meso and macro perspectives of change management that are considered to influence the factors that determine the outcomes of change initiatives by CEOs, and GMs in a variety of high-performance sports around the world. These perspectives address leadership qualities such as having a growth mindset, the ability to form a strategic plan, construction of structures, systems and processes to guide evidence-based change and the ability to create and communicate a vision, culture and philosophy to stakeholders at all structural levels within an organisation. In addition, the onus on the organisation to support group-led change and effectively manage pockets of organisational resistance, in the form of derailers, is included. Findings emerging from this study are important for increasing the understanding of what factors contribute to achieving successful outcomes when undertaking change initiatives in HPSOs.

Chapter 7: Creating an Evidence and Experiential Based Practical Guide for Leaders Managing Change and Performance Dimensions in HPSOs

Chapter 7.1 Introduction

In 2018, Spanish soccer's FC Barcelona became the first team in global sport to record an average basic first-team salary profile of over £10 million per year (Sporting Intelligence, 2018). This figure, which excluded performance-related add-ons, signing fees, loyalty bonuses or other contractual additions, more than doubled the annual average basic salary of £4.7m paid to the New York Yankees' 2010 playing staff, which was the highest paying team in world sport just 8 years earlier (Sporting Intelligence, 2013). From a collective perspective, the NBA is currently the top paying league in the world, with average basic salaries per player, per season of nearly £6.7 million (Sporting Intelligence, 2019).

The dramatic elevation in average team salaries reflects the astronomical escalation in player wages that has occurred during the post-commercialisation phase of sport, with the 350 teams that populate 18 leagues, across 13 countries, in 8 major global sports paying $22.6 billion in wages in 2019. This represents a rise from $15.75 billion in 2013 (Sporting Intelligence, 2013, 2019) and as the wage to revenue ratio of 70% is considered to be a benchmark for organisational sustainability in European professional soccer leagues, this threshold has implications for all aspects of team operations, as teams seek to finance, retain and protect their most significant assets (Deloitte, 2019).

Given the dramatic increase in player wages, teams must carefully consider all aspects of their operations which contribute to revenue generation, in order to meet a wage to revenue ratio that allows them to survive and thrive, particularly when teams' player wage spends have been shown to directly correlate to overall league position (Carmichael et al., 2011).

Performance operations must be rigorously and objectively assessed, implemented, reviewed and developed in order to: mitigate risks that negatively impact health, wellbeing and performance of all staff; attract and retain the best talent available at each level; and ensure an organisation gains competitive advantages that contribute to achieving sustained success. Consequently, the analysis of the strategic reviews, annual reports and annual accounts of multiple high performance sports organisations (HPSOs) that was conducted in Chapter 2, indicates that player/team performance, creation and dissemination of intellectual property, social and community engagement, brand development, global business development, heritage, support services performance and financial services management are all verticals that contribute to the overall value metrics of an HPSO (Borussia Dortmund, 2019; City Football Group, 2019; FC Barcelona, 2015, 2019; Juventus, 2019a, 2019b; Real Madrid, 2019a, 2019b).

Elite sport is a volatile professional domain, characterised by organisational change, fuelled by the demands for sustained success (C R D Wagstaff et al., 2015). However, whilst change and innovation are deemed defining aspects of HPSOs, the previous chapters have highlighted the fact that there is a considerable lack of evidence to address how the senior leaders, change leaders and employees involved should plan and execute change initiatives or manage performance dimensions.

Consequently, employee turnover in all departments of HPSOs, from coaching to performance staff to front office executives, has become a firmly established reflex to results that fail to meet expectations, which are often lacking in comprehension and clarity, whilst being poorly communicated from the outset (Cruickshank & Collins, 2012a).

7.2 Literature Review

7.2.1 Change Management - Micro Perspectives, Meso Perspectives and Macro Perspectives

As investment in the sports industry increases, the implications of undertaking change initiatives, which are inherently proven to be risky pursuits, must be carefully considered. Most change initiatives fail to achieve their goals (Ashkenas, 2013), whilst concurrently producing high opportunity and process costs, which can seem to outweigh the benefits of the change itself (Jacobs et al., 2013).

As the previous chapters have highlighted, demands for sustained success in HPSOs promote ongoing organisational change (C R D Wagstaff et al., 2015). Leaders must manage change at all levels, understanding the micro perspectives (which consider the psychological impact on individual perceptions, coping strategies and the stress imparted on those exposed to change); the meso perspectives (which consider the organisational context including organisational identity, values, processes and overall expectations); and the macro perspectives (which consider the organisational ecology, including structure, inertia, legal implications, political landscape and organisational fitness and mortality), which influence the success or failure of the outcome (Vakola, 2013).

As failing change initiatives can divert resources from operational tasks, cause disruption to well-established systems, whilst introducing scepticism and a lack of trust in employees and business partners, it is important that the processes guiding research and implementation are well planned and directed. Additionally, the managerial capacity of those implementing change initiatives needs to be of a suitable standard to allow them to take overall accountability for their outcomes (Ashkenas, 2013).

7.2.2 Performance Management - Strategic, Operational, Individual and MSMSD Leadership

HPSOs operate in complex and idiosyncratic environments, where multiple stakeholders demand results related to performance, entertainment and financial profit. Subsequently, each department must support sustained optimal performance, (Cruickshank & Collins, 2012a) with leaders responsible for building and nurturing multiple-discipline groups, renowned for complicated inter-professional relationships, whilst concurrently managing an expansive web of performance management dimensions (Reid et al., 2004; C R D Wagstaff et al., 2015). Consequently, the specialist leadership roles that have evolved, demand a unique array of 'hard skills', required to efficiently manage the strategic and operational dimensions of performance, in addition to the 'soft skills' required to manage the individual and leadership dimensions of performance (Fletcher & Arnold, 2011).

7.2.3 Aims and Objectives

The aim of this paper is to provide a practical guide, that can be a reference for leaders tasked with driving change and managing performance in the high-performance sports industry.

In achieving the aim of this study, the objectives will be to:

1) reference current research to provide an evidence-based foundation;

2) collate the anonymised responses of change leaders during the interviews conducted in Chapter 5 and Chapter 6;

3) collate the notes recording the anonymised thoughts of executives or senior leaders from HPSOs in various sports around the World, with whom the author has shared informal conversations;

4) draw on the author's reflections from previous experiences.

7.3 Method

This study will assimilate evidence from the current literature; findings of the previous studies in this thesis; reflections on the challenges experienced by the author whilst leading change initiatives in HPSOs; and the observations and strategies discussed by change leaders operating in various executive or senior leadership roles for HPSOs, in order to inform a structured approach to the foundational investigations and an open loop performance management system that can guide change leaders.

The open loop performance management system will incorporate strategic management, operational management, individual management and leadership management components, whilst also integrating the micro perspectives, meso perspectives and macro perspectives of managing change.

7.3.1 Design

As outlined in Chapter 5 and Chapter 6, the recorded interviews followed a four-phase interview guide. The semi-structured nature of the interviews led the exploration of the research area, by collecting similar themes of information (Holloway & Galvin, 2017), with the follow-up responses to the participants' questions permitted to deviate from the interview structure, facilitating improvisation where necessary (Kallio et al., 2016). Meanwhile, the informal conversations had the freedom to explore all aspects of interest in the areas of performance and change management in relation to each individual context.

The semi-structured interviews were recorded as described using VOIP software and data was transcribed from the recordings. Whilst the informal conversations and meetings were not recorded, the author completed a personal reflection process following each conversation, noting the salient points, which informed a summary of the topics covered and the lessons learnt from each individual. Both methods of data collection enabled a reciprocity between the interviewer and participants (Galletta & Cross, 2013).

Both data sets were then examined through thematic analysis, from which a framework of patterned responses relevant to the inquiry was identified through coded data points, in line with the 6-step method of thematic analysis outlined in Chapter 5 (Braun & Clarke, 2006). Whilst Braun and Clarke's guidelines identify 6 distinct phases, the analysis was a recursive process, as opposed to a linear one, with the researcher moving back and forth between the phases, as the conversations required (Braun & Clarke, 2006).

7.3.2 Participants

With regards the semi-structure interviews and informal conversations, a purposive sampling technique was employed to recruit or arrange meetings with subjects with first-hand knowledge and experience of operating in the environment identified in the study's objectives, as outlined in Chapter 5 and Chapter 6. The selection criterion for the semi-structured interviews stipulated that subjects had to be either a current CEO/president (CEO) or general manager/sporting director (GM) of a professional sports organisation or governing body or held that role within 4 months of participating in the interview.

Table 7.1 illustrates the demographics of the sample for the semi-structured interviews, which consisted of 8 GMs (8 males), aged between 40 and 52 years (M = 46.38, SD = 3.81), and 5 CEOs (5 males), aged between 44 and 64 years (M = 55, SD = 7.21). Participants had worked in professional sport, in a non-playing capacity, for 10 to 34 years (M = 23.46, SD = 6.83), serving in their current role for between 2 and 18 years (M = 6.15, SD = 4.49).

Table 7.1 Demographic of semi-structured interview subjects

POSITION	CHARACTERISTICS	RANGE (YEARS)	MEAN (YEARS)	STANDARD DEVIATION (YEARS)
Sporting Director/General Manager (GM)	Age	40 - 52	46.38	3.81
	Years in Sport (Non-Playing)	10 - 30	22.25	6.12
	Years in Role	2 - 18	5.38	5.12
President/CEO (CEO)	Age	44 - 64	52	7.21
	Years in Sport (Non-Playing)	12 - 34	25.4	8.06
	Years in Role	3 - 12	7.4	2.87
Total Cohort	Age	40 - 64	48.23	6.94
	Years in Sport (Non-Playing)	10 - 34	23.46	6.83
	Years in Role	2 - 18	6.15	4.49

The selection criteria for the meetings and informal conversations stipulated that subjects had to be employed in an executive or senior leadership role in a professional sports organisation, governing body or professional performance arts organisation.

Table 7.2 illustrates the demographics of the sample for the meetings and informal interviews, which consisted of 5 CEO/president/managing directors (CEO), 4 chief of operations (COO), 2 sporting directors/GMs (GM), 15 performance directors (PD), 1 director of player development (DPD), 1 associate commissioner (AC), 2 directors of business development (DBDev), 2 directors of medical services (DMS), 1 nutrition coordinator (NC), 1 director of performance rehabilitation (DPR), 2 assistant GMs (AGM), 1 assistant performance director (APD), 1 assistant director of player development (ADPD), 1 head physiotherapist (HPT), 3 heads of mental performance (HMP), 5 heads of strength & conditioning (HSC), 1 head athletic trainer (HAT) and 2 senior physiotherapists (SPT).

Table 7.2 Demographic of informal conversation subjects

LEAGUE	COUNTRY	ROLE	COUNTRY OF ORIGIN	n=1
MLB	USA & Canada	Performance Director	British	1
		Performance Director	USA	1
		Asst Performance Director	USA	1
		Director of Player Development	USA	1
		Asst Director of Player Development	USA	1
		Head of S&C	USA	3
		Nutrition Coordinator	Japan	1
		Director of Medical Services	USA	1
		Head of Mental Performance	USA	1
		Head Athletic Trainer	USA	1
MLS	USA & Canada	President	Canadian	1
		Chief of Operations	Canadian	1
		Sporting Director/GM	USA	1
		Performance Director	British	2
		Performance Director	USA	1
NBA	USA & Canada	Chief of Operations	USA	1
		Asst GM	USA	2
		Performance Director	USA	2
		Director of Performance Rehabilitation	USA	1
		Head of S&C	USA	2
		Senior Physical Therapist	Australian	1
		Senior Physical Therapist	USA	1
		Head of Mental Performance	USA	1
NHL	USA & Canada	Head of Mental Performance	USA	1
		Performance Director	British	1
Canadian Sport Institute	Canada	Performance Director	USA	1
NASCAR	USA	Director of Business Development	USA	1

LEAGUE	COUNTRY	ROLE	COUNTRY OF ORIGIN	n=1
NCAA	USA	Associate Commissioner	USA	1
		Performance Director Associate AD	USA	1
NFL	USA	President	USA	1
		Performance Director	USA	1
XFL	USA	Chief of Operations	USA	1
Premiership Rugby	England	CEO	British	1
Top 14 Rugby	France	Performance Director	British	1
EPL	England	CEO	British	1
		COO	British	1
		Performance Director	British	1
		Head Physiotherapist	British	1
SPL	Scotland	Managing Director	British	1
		Sporting Director/GM	British	1
Bundesliga	Germany	Director of Business Development	German	1
MMA	International	Performance Director	British	1
Extreme Sports	International	Performance Director	Swedish	1
Circus	International	Director of Medical Services	British	1

The subjects worked in organisations that operated in leagues, competitions or performance arts companies whose participant teams, sole representative athletes or performance arts shows were located in USA and Canada (31), USA (6), Canada (1), England (5), Scotland (2), France (1), Germany (1) and internationally (3).

7.3.3 Ethics

A proposal outlining the intended methodology was submitted for ethics approval. This included participant recruitment email drafts, an interview schedule, a participant information form (Scahill, 2015) and a participant consent form (Stanford University, 2016) for the semi-structured interviews, which were used for data collection in the study outlined in Chapter 5 and Chapter 6. These documents stipulated that the data might be used for further related studies that were to be included in the author's PhD thesis.

The research proposal was reviewed and granted ethics approval by the University of British Columbia's BREB, following completion of an ethics risk assessment, in accordance with their research governance policies and procedures.

7.3.4 Interview Guide

To investigate the purpose of the semi-structured interview component of the study, a four-phase interview guide was structured, which is outlined in Chapter 5 (Abrell-Vogel & Rowold, 2014; Armenakis et al., 1993, 1999; Gilmore & Sillince, 2014; Jansen, 2004; D. Paper & Chang, 2005; Parahoo, 2014; Rafferty & Jimmieson, 2017; Sikdar & Payyazhi, 2014). The interview framework was used to guide the interviewer on the topics to be considered and the information to be covered. However, the interviewer could dictate how the questions were phrased and how the themes were linked, in order to enable a flow to the conversation.

7.3.5 Data Analysis and Representation

The semi-structured interviews, ranging in duration from 33 to 76 minutes (M = 58.92, SD = 12.85), were digitally recorded in their entirety and transcribed verbatim. A pseudonym was used to identify each participant and all dialogue containing identifiable information, relating to individuals or organisations, was anonymised.

The informal conversations and meetings were not timed. A process of personal reflection followed each meeting, with the author recording notes of the salient points to give a summary overview of the topics covered and the lessons learnt from each individual.

Thematic analysis was then conducted, as per the process outlined in Chapter 5, to answer the research questions and form the basis of the discussion, in reference to emergent themes identified in the literature (Al-Haddad & Kotnour, 2015; Braun & Clarke, 2006; Burnes, 1996; Lincoln & Guba, 1985; Pettigrew, 1987). The results were then discussed in turn in relation to the peer reviewed journal articles accessed during the systematic review outlined in Chapter 4 and all other relevant evidence explored throughout the process of compiling this thesis. The author's personal experiences managing change and performance dimensions in HPSOs were included as relevant, to provide real world perspective and reflections.

7.4 Results

Data points from 13 semi-structured interviews and 50 informal conversations, were analysed. Of the 13 participants in the semi-structured interviews, five nationalities were represented, in New Zealand (3), USA (3), Canada (2), Great Britain (4) and Australia (1). Of the 50 participants in the informal conversations, seven nationalities were represented, in USA (30), British (14), Canadian (2), Japanese (1), Australian (1), German (1) and Swedish (1). Interviewees came from a variety of sporting backgrounds, with teams from American football (NFL), basketball (NBA), baseball (MLB), international cricket, rugby (English Premiership [1], Super Rugby [2] and international rugby [1]), soccer (EPL [1], Football League Championship [1], MLS [2] and international soccer [1]) each being represented. Participants in the informal conversations came from baseball (MLB), basketball (NBA), ice hockey (NHL), Olympic sports (national sports institute), motor racing (NASCAR), American football (NFL [2] and XFL[1]), soccer (EPL [4], SPL [2], Bundesliga [1], MLS [6]), rugby (Top 14 [1], English Premiership [1]), collegiate sport (NCAA), mixed martial arts (UFC), extreme sports and circus.

Table 7.3 illustrates the clear themes that were identified and are discussed, in reference to the micro, meso and macro perspectives of change management and four dimensions of performance management (strategic, operational, individual and leadership), each considered against the various phases of: operational due diligence; preparation and evaluation; early stage execution and environmental development; exploring, researching, planning and preparing for change; leading performance whilst implementing and integrating change; assessment and evaluation; adjustments and the area of personal health, wellbeing and performance.

Table 7.3 Process evaluation themes & sub themes

OVERARCHING THEMES	THEMATIC SUB THEMES
Operational Due Diligence	1. Mindset & expectations of change leaders in organization 2. Identification, oration & guardianship of culture & philosophy 3. Organizational resistance 4. Strategic planning - identification of vision, mission, goals, values, behaviours, measures of success 5. Clarity of roles & responsibilities 6. Facilitating team cohesion & collaboration
Preparation & Evaluation	1. Internal & external environmental analysis 2. Cultural evaluation 3. Identification of core strategic priorities 4. Linking departmental strategic goals to organizational strategic goals 5. Stakeholder alignment
Early Stage Execution & Environmental Development	1. Identification of vision, mission, objectives, values, beliefs & core behaviours 2. Cultural development 3. Bias towards systems, processes & strategic thinking operating framework 4. Holistic performance model development 5. Systemization of communication 6. Intra- & inter-departmental relationship development
Exploring, Researching, Planning & Preparing for Change	1. Process-driven evidence-based research 2. Group led change 3. 2-way communication of change impact 4. Risk assessment 5. Change monitoring 6. Strategic planning 7. Change governance
Leading Performance Whilst Implementing & Integrating Change	1. Strategic management 2. Operational management (governance, finance, communications, operations, culture, education, HR, physical resources, audit) 3. Individual management (coaching, mentoring, appraisal) 4. Leadership (role modelling, emotional contagion, incentivization) 5. Change management (micro, meso & macro perspectives)
Assessment & Evaluation	1. Monitor, assess & evaluate performance processes 2. Feedback
Adjustments	1. Group responses 2. Intra-team coaching (feedback, mentoring, discipline) 3. 2-way communications
Personal Health, Wellbeing & Performance	1. Lifestyle choices 2. Executive coaching & mentoring 3. Ethics & values

7.5 An Evidence and Experiential Based Practical Guide for Leaders Managing Change and Performance Dimensions in HPSOs

7.5.1 Operational Due Diligence

It is important to gain immediate clarity of what the organisation would like to see as an outcome. Some HPSOs want to focus on attracting athletes, others are more concerned with retaining athletes, whilst others have the desire to take raw talent, nurture young athletes and guide them through the transition into elite performers before trading them. It is imperative to have everyone on the same page and sharing the same expectations (MD 1, GM 3, GM 7, PD 2, PD 15).

Initial conversations with an HPSO should be used to manage expectations by outlining:

- the time it takes to affect change and build a specific department or organisation (PD 2, PD 8, PD 11);

- the investment in time, effort and resource required to initiate, research, plan, implement and integrate change initiatives (CEO 3, GM 8, DMS 2);

- the complexities of an initiative - particularly how humans see the complexities in what they know but ignore or fail to acknowledge the complexities in someone else's world - which subsequently impact its integration, as this is an active process that requires commitment, time, teamwork and leadership from those involved (CEO 1, COO 3, PD 14) (Collins & Cruickshank, 2015; Cruickshank & Collins, 2012a; Sporer & Windt, 2018).

- the change process and the "messy middle of change", explaining that change is an iterative process, that involves overlap and interaction between domains (MD 1, PD 2, PD 11, APD 1) (Fletcher & Arnold, 2011; Kanter, 2009).

It follows, therefore, that the same discussion extends to how performance is going to be objectively measured and which metrics will be used to identify success in each parameter (CEO 4, CEO 8, GM 3, PD 2, PD 11, PD 14).

Once the characteristics of success have been defined, there has to be a recognition of what the current environment looks like and what will be involved in transitioning from the present situation. All stakeholders must understand that performance optimisation is an iterative, responsive process that has to make sense of a complex interaction of contributing factors in each unique context and involves overlap and interaction between domains (CEO3, GM 2) (Fletcher & Arnold, 2011). Positive outcomes may take time to achieve and often only occur after a short-term deterioration of results as the system adjusts. Therefore, patience allied to an ability to learn and adapt is necessary (CEO 8, GM 2, GM 3, P2, CEO) (Tee et al., 2018).

Change leaders must champion long-term strategic plans and policies that will support performance, as teamwork develops over time through developmental processes and episodic cycles. In the training environments researched by Henriksen, Stambulova & Roessler, they observed stakeholders' agreement that "successful development is more important than early results…the Club can always improve" (K Henriksen et al., 2010). This philosophy was shared by many of those in the interviews and informal conversations (CEO 1, CEO 6, CEO 8, GM 2, GM 3, PD 2, PD 7) (K Henriksen et al., 2010; Kristoffer Henriksen et al., 2010).

Several of the participants were eager to underline that in their experience, teams transfixed by outcome over process (as opposed to focusing on the process adopted to achieve the outcome) will always experience greater challenges (CEO 3, CEO 4, GM 2, GM 6, PD 2) (Collins & Cruickshank, 2015). The importance of retaining perspective and prioritising long-term over short-term outcomes was frequently mentioned by those operating in HPSOs that have achieved sustained success. The comment made by one participant that "you don't win sport", aptly reinforced the common observation of the executive cohort that it is necessary to balance short-term, medium-term and long-term objectives, as opposed to focusing exclusively on short-term results (CEO 1, MD 1, GM 8, PD 13).

Some participants explained the risks associated with turnaround approaches driven by short-term necessities, which were viewed as being inconsistent with sustaining long-term high performance and with stakeholder-centred views, which risk damaging relationships (CEO 4, PD 2, PD 5, PD 6, PD 8).

Many of participants recognized that, given the extensive variety of role titles in the industry and a lack of standardisation in organisational specificity of responsibilities, it was important to gain clarity of the roles and responsibilities of change leaders within the organisation. One role that is often susceptible to imaginative titling and a wide-ranging scope of responsibilities is that of the PD, which has titles that can include the terms "head or director", "high, elite, human or athletic" and "performance" (Buchheit & Carolan, 2019). A few participants explained that their organisations required the PD to facilitate communication between coaching and the MSMSD (PD 9, PD 12, PD 15) (Tee et al., 2018).

The consensus within the cohort was that PDs are responsible for supporting professionals from multiple science and medical services disciplines to work collectively in creating action plans and programs that cater to the physical, emotional and logistical needs of athletes and coaches. Several participants mentioned that when this role is executed to a high standard, supported by clear communication, shared goals and a belief in the values of self and services of others in the team, a synergy exists among the various professions (PD 2, PD 9, PD 13, PD15, APD 1) (McCalla & Fitzpatrick, 2016). It was commonly deemed imperative that PDs share understanding about what is to be achieved, in addition to developing the capacity of the people in their team and of the organisation to achieve it, by providing the support and guidance that each party needs to improve their respective performances (PD 1, PD 2, PD 3, PD 6, PD 13) (Thorpe & Holloway, 2008).

The necessity for PDs to create a synergy between a diverse collection of multiple disciplinary professionals was related to the understanding that athlete development is a non-linear, complex neurobiological process that is influenced by training, practice, coaching and competing and depends on muscular, neurological, cultural, skeletal, social, psychological, physiological, genetic and environmental variables (PD 2, PD 7, PD 9, PD 14) (Phillips et al., 2010). Consequently, no one player's journey is the same, thus demanding that training prescription, athlete health and coaching are interconnected subsystems of an overall integrated performance system. These subsystems are responsible for guiding practice, research cohesion and decision making, with the coaching team, MSMSD and athlete sharing interdependent responsibilities for the latter's health and success (PD 2, PD 7, PD 9, PD 11, PD 14, PD 15, SPT 1) (Mooney et al., 2017).

To this end, a number of participants concurred with the research findings that integrated specialist systems achieve better results than generalist systems (GM 2, GM 3, PD 2, PD 8, PD 11, PD 14, DMS 2) (Hägglund et al., 2016; Tee et al., 2018), and that, as a result of the complexities, performance and wellness (which can also be ventures that stimulate vitalising stress, as opposed to just relaxing modalities) are therefore, always in flux.

From an environmental standpoint, identifying the culture of the HPSO was deemed imperative, as a poor culture will struggle to embrace and support change, given the sacrifices and commitments people need to make. There is a need to move the culture from 'me' to 'we', so that everyone believes that the whole team are 'in the trenches' together, bringing a sense of togetherness and family. Being a part of something bigger can maintain personal motivation during tough individual times. Sustained success itself, is an infinite game and counterintuitively, culture can be improved despite losing an overall game, but sustained winning is absolutely underpinned by culture. (CEO 1, CEO 3, GM 2, PD 2) (Eat Sleep Work Repeat, 2019; Hughes, 2018).

Other red flags reportedly important to identify at this stage, along with an unhealthy culture, are related to identity, recent success, political factions and resisters (GM 6, PD 2, PD3, PD 12), whilst the fit with board and staff is also wisely established at the outset (CEO 8, MD 1, GM 3, PD 1, PD 5) (Cruickshank et al., 2013, 2015).

7.5.2 Preparation and Evaluation

The preparation and evaluation phase can apply both to those leaders who are starting out in a new leadership role in an organisation, or to change leaders who are evaluating the environment in relation to a proposed change initiative.

For newly recruited leaders, there is a finite phase of initial evaluation, planning and impact that is required to establish one's self, as well as the focus, content and nature of the program that is to be led (CEO 8, MD 1, GM 8, PD2, PD 6, PD 7) (Cruickshank et al., 2013, 2015).

Participants suggested that the environmental evaluation should include an internal analysis of resources and capabilities (a resource-based view), allied to identifying the artefacts, values and underlying assumptions to help gain an understanding of the fit with the existing culture, systems and unique values of the organisation or department (CEO 8, MD 1, GM 8, PD 2, PD 4, PD 13, DMS 2) (Frontiera, 2010). This part of the process requires the new leader to reflect on the situation and revise their existing mental models in order to fit the context, as well as understanding whether a change of culture (introducing new principles and practices) or a change in culture (doing what's already done but better) is more suitable (CEO 3, MD 1, GM 2, GM 6, PD8, DMS 2) (Cruickshank & Collins, 2012b). During this process, it will be possible to identify, recruit and harness social allies and cultural architects, that will help model an adaptive culture and help other members of the group to anticipate and adapt to the environmental change. This step is just as important for change leaders preparing for initiating a change initiative (CEO 8, MD 1, PD 2) (Frontiera, 2010; Hughes, 2018).

When encountering different societal constructs, for example when leading in Asia versus Europe versus North America, it is also valuable to do some cultural research and establish whether the societal norm is individualistic, where there is an emphasis on the individual over the entire group (in this case research suggests it will be important to magnify team leader - member skill distance) or collectivist, where there is an emphasis on the group over the individual (wherein the research supports the need to magnify the team leader - member skill distance up to a point) (Tian et al., 2015).

Concurrently, participants highlighted the importance of identifying aspects of dysfunction (negativity, losing habit, self-serving attitudes), divergent agendas (driven by adherence to existing practices, or personal opinions on team progress) and consequential subversive actions, which are magnified by lack of trust, poor group cohesion, lack of clear leadership and poor results. (GM 6, PD 7, PD 11) (Cruickshank et al., 2015). There is value in identifying who are in good relationships, who are in bad relationships and establishing where the power lies within the group. Once identified, there comes the need to name what's not right and address it at the right time with passion and compassion (CEO 3, PD 2, APD 1) (Eat Sleep Work Repeat, 2019).

Recently recruited leaders to HPSOs must understand that, people at this stage will still be navigating the phase of anticipation and uncertainty (leading to a climate of sensitivity, rumour, speculation and gossip) and transitioning into a phase of upheaval and realisation (characterised by a gaining of perspective and confirming assumptions).

Patience will be necessary as they enter the next phase of integration and experimentation (where they begin to challenge assumptions and develop new practices) before they reach the phase of normalisation and learning (establishing norms and reflecting on the change) (C R D Wagstaff et al., 2015). Some advised that this can contribute to the decision to withhold initial action in sub-optimal conditions (GM 1, PD 12).

Having a 360 degree view of the two way relationships of power between all the stakeholders involved and managing in a multi-directional manner (upwards, downwards and laterally) is required in order to set and align multi-stakeholder perceptions and expectations, which includes the setting of standards and values (CEO 3, GM 2, GM 6, PD 1) (Cruickshank et al., 2015). This necessitates the building of quality relationships, characterised by care, authenticity, and intimacy, with structurally and socially influential actors (CEO, board members, cultural architects, media, future hot prospects, ex-talents), with sensitivity to their perceptions, opinions, power but with an awareness of the bigger picture, to help gain a unified and consistent approach to change (CEO 2, CEO 3, DBDev 1) (Collins & Cruickshank, 2012; Cruickshank et al., 2014). Meanwhile, an analysis of the competitive environment within which the HPSO exists will help to establish the strategic positioning of the organisation in the market and identify any competitive advantages that can be exploited.

Participants recommended identifying no more than 3 clear priorities that will have the most significant impact on the areas for which the leader is responsible and conducting a mission analysis to define the outcome and process goals that will help achieve the vision (McEwan & Beauchamp, 2014).

This will demonstrate focus and provide clarity for those in the department or organisation as to where their efforts should be directed and for what they are to be held accountable. Frequent and consistent communication is then required to reinforce this information (CEO 8, MD 1, GM 3). It is worth considering that support for a new regime is more readily built in the early stages by delivering instant results in easy win areas and so balancing short term and long-term plans is a sensible option (MD 1, AGM 2, PD 2, PD 3, PD 10) (Cruickshank et al., 2013).

On a practical level, undertaking a four-step process for each of the priority issues that have been identified will ensure objectivity is employed in resolving the issue (Tee et al., 2018):

1) establish the extent of the problem (audit);

2) contributing mechanisms or root causes of the problem;

3) introduce preventative measures, underpinned by risk assessment and the formation of potential strategies based on research, experience and current best practice (but with cognisance of resource and time availability);

4) Assess effectiveness by repeating steps.

7.5.3 Early Stage Execution and Environmental Development

By negotiating with the key institutional stakeholders, such as the CEO or the board, to build strategic consensus, the performance leader must steer the HPSO through the development of their vision, mission, strategy, and objectives. These will explicitly communicate a shared understanding of organisational priorities, which must consequently be made measurable in order to evaluate performance, inform planning and translate into meaningful practice for individual roles and groups (CEO 6, CEO 5, GM 2) (DeNisi & Murphy, 2017; Molan et al., 2019).

Destination planning to create a shared vision, that explains what you are trying to achieve was identified as a critical early task to complete, in order to ensure aspirations are emotionally charged and provide internal motivation for the group. However, whilst the vision must be appropriately focused, it must retain flexibility, allowing it to adapt and evolve over time, whilst also being aligned with the organisation's strategic objectives. This involves a two-way interaction and power flow with the board (Fletcher & Arnold, 2011). Choosing an internal motive (such as "being the best we can be', or to "push the boundaries of what is possible in the sport') is more effective than an external motive (such as winning a trophy) (Turner et al., 2019). The process demands collective input, enabling influence from staff feedback and stakeholder expectations, which stimulates shared ownership within the team (CEO 1, CEO 6, CEO 8, GM 2, GM 3, PD 1, PD 14).

Strategy formulation is then the next step, by formulating a mission (detailing the immediate how) that underpins the vision with a strategy (resource demands, staff training, required athlete support) and outlining how the vision will be achieved by employing a specific set of tactics (VMOST Analysis) (Turner et al., 2019). The strategy should allay concerns of those above, whilst tempering expectations in the face of good results (Cruickshank & Collins, 2012a). Participants advised that by getting people committing first to the team mission, individual interests become subordinate to the broader team purpose (GM 2, GM 3, PD 2).

Once the vision and mission have been defined, it is important that the culture is further founded in the beliefs, values and core behaviours, that are collaboratively developed through two-way interactions and power flows between leadership and the model employees in the HPSO (Hughes, 2018). Values and norms shape behaviour by guiding decision-making without formal rules and, if aligned with the individual, provide meaning and increase internal motivation. Therefore, group regulation is enabled by having these group representatives create direction, deliver the messages and set examples, which is further reinforced by the identification and empowerment of cultural architects. By articulating these beliefs, values and behaviours and having leaders walk the talk and model the values from the outset, every member of the group understands what standards they must adhere to (Cruickshank et al., 2015; Frontiera, 2010; Hughes, 2018).

These guidelines serve to provide a positive influence on the environment, thus subtly shaping the physical, structural and psychosocial context in which staff and players make performance-impacting decisions (Cruickshank et al., 2013). Subsequently, there was a belief that operational mistakes and failures should be well-tolerated as they highlight inadequate training, communication or supervision, yet there should be low tolerance for deviations from the shared beliefs, values and core behaviours that form the accepted code of the group (Hughes, 2018). To this end cancerous individuals (negative and malignant players) should be identified and removed quickly, as they can distract other performers' and support staff's attention from the task, bringing a sense of negativity, forming cliques impairing cohesion and derailing performance (Cruickshank & Collins, 2012a).

Consequently, a climate of cooperation and collaboration is actively created, where people are comfortable to try new things and innovate (CEO 1, CEO 4, CEO 8) (Reid et al., 2004).

These pillars should then immediately be disseminated throughout the organisation and communicated clearly every day, using a variety of media. This promotes long-term acceptance and regulation of the culture through integrated management of both internal and external stakeholder perceptions, expectations and interpretations. Establishing rituals, stories and unique language are just some of the ways that can serve to unite the group and underpin the vision (Maitland et al., 2015). The message should be reinforced by relating every task, such as meeting formats, staff development, decision-making and recruitment, back to these pillars to emphasise the vision's authenticity, realistic and appropriate nature, whilst being role modelled in everything that the leader does (Cruickshank & Collins, 2012a). This approach demonstrates values and beliefs by modelling them in daily behaviours, which can inform deliberate ways of working.

There was consensus that the vision should additionally be monitored using consistent systems, structures, and processes, to help establish its power as a guiding ideology. Establishing two-way interactions with external parties, ensures the media, alumni and fans are also made aware of its place in organisational governance (CEO 8, COO 4, GM 2, GM 3, GM 6, PD 1, PD 2, PD 13) (Collins & Cruickshank, 2012; Cruickshank et al., 2015; Fletcher & Arnold, 2011).

This framework can then provide the foundation upon which a performance model/plan is created, characterised by short-, medium- and long-term goals that are driven by the processes required to achieve them. However, there was a belief that the framework should not be a fixed entity, instead undergoing constant review and evolution as new evidence or experiences emerge. As such, each performance plan should include contingencies to enable calculated reactions and must be constructed in line with a deterministic model, in order to predict the relationships between a performance outcome measure and the factors that produce it. This helps accurately measure progress, using the most appropriate objective markers (COO 3, PD 2, PD 11).

These plans will determine work distribution, order and timing of task related activities, roles and responsibilities, which in turn, by being cognisant of situational and time constraints, resources, environmental changes and member abilities, inform the structure of the organisation (Ryan et al., 2018). The structure must be appropriate to the context of the environment and respectful of the traditions, rules, history, resources and relationships that exist in the HPSO, whilst also explaining the approach and methods employed to all stakeholders (CEO 4, MD 1, COO 2, PD 12) (Ryan et al., 2018).

In the Scandinavian athletics club model outlined by Henriksen, Stambulova and Roessler, group and team organisation are pre-conditions for the development and continued motivation of athletes and coaches, by intentionally forming a family environment, in which everybody contributes. As such, the leadership group demand openness, cooperation, autonomy and self-responsibility among staff and athletes, which is allied to greater professionalism and structure at every level (K Henriksen et al., 2010).

It must also be remembered that in creating a high performance environment, it is imperative to create a team's soul, where people can also be who they are and allows people to have fun at appropriate times, which serves to release tension and reset during the hours away from peak performance times (Eat Sleep Work Repeat, 2019).

For performance operations departments, the structure should facilitate a model that promotes a holistic, whole person centred approach, that strives to deliver in support of the development of players' physical abilities, and increase resilience using a combination of both best practice (combined experiences) and evidence-based (research literature) approaches within each service resourced (Ryan et al., 2018). Participants underline that in order to allow the athlete to perform at the best level possible, high performance expectations must be insisted upon, whilst concurrently advocating: excellence; nurturing of talent; trust through two-way interactions and power flow with performers (with negotiation cognisant of age and learning style); and employing a systematic approach (J. Smith & Smolianov, 2016). Organisations engaged in youth athletic development, should adopt a model that focuses on developing healthy, capable and resilient young athletes (GM 2, GM 8, DPD 1, ADPD 2, PD 1, PD 2, PD13, APD 1, HSC 1, HSC 2). The same humanistic approach should also be extended to every member of the team in line with their own unique needs and developmental demands.

Whilst aiming to create a stable department, change should still be expected and viewed as necessary. This enables transition between interactive and holistic working as the context demands, given that training prescription, athlete health and coaching are interconnected subsystems of an overall integrated performance system (Cruickshank & Collins, 2012b).

The structure should promote coordination (task contributions are clearly delineated and in sync with the plan), cooperation and open communication, thus guiding practice, research cohesion and decision making, with the health and success of the athlete having interdependent responsibilities by the athlete, coaching team and MSMSD (CEO 1, CEO 5, GM 6, PD 12, PD13) (Mooney et al., 2017). One of the most critical factors in ensuring that interconnected subsystems are functional, was deemed to be the appropriate flow of information and, as such lines of communication, should be systematised - particularly between departments such as performance science and medicine and coaching.

One example of this critical aspect of interactive working, relying on clear communication and open discussion between the athlete, coaching team and members of the MSMSD team, concerns the individualised delineation of acceptable risk, when evaluating the balance between safeguarding athlete health and pushing the boundaries of athlete performance during training. This process requires the assimilation of objective data and experiential learning, whilst acknowledging the different perspectives and biases that the different people in the team will have, based on their experience, training and philosophical backgrounds. By ensuring that each party has access to all necessary data and that priorities for each athlete, in relation to health (maximising the athlete's availability for selection and play), performance (maximising individual and team on-field performance) and development (maximising the athlete's potential to improve daily) have been identified and communicated, the group can navigate the scientific, moral and philosophical challenges of the decision-making task.

Failure to create boundaries through process, share objective markers of risk and consider the situation from a number of perspectives, can lead to abuse of the shared values system, abdication of responsibility and accountability by certain team members, the permeation of toxicity into relationships and an increase in the risk of failure in the integrated performance system, all of which place the athlete's health and wellbeing in a position of compromise. There must also be a recognition that when working as an integrated team, sensitive information needs to be managed appropriately and charters can be created to outline information confidentiality and dissemination (PD 1, PD 10, PD12, PD 13, HPT 1, HSC 4) (Collins et al., 1999). Without the sufficient boundaries to define a clear information management system, it becomes difficult to navigate the flow of information through the network of multiple stakeholders whilst ensuring the necessary confidentiality is afforded to sensitive information. Sharing of data that can compromise an individual when in the wrong hands, can compromise the trust, which is integral to effective inter- and transdisciplinary functioning.

In light of this, another important area of communication, that must be formally addressed from the outset is that of conflict management. Conflict is a necessary part of growth and rejuvenation, stimulating re-evaluation, new ideas and clarification but processes must be in place to actively manage conflict quickly, with respect and with a focus on reconciliation (PD 2) (Reid et al., 2004). Promoting intra- and inter-departmental collaboration and connection away from the daily work demands is an important pre-emptive to conflict management, by facilitating the development of relationships and respect on a personal level.

By understanding the importance of each link in the system, (e.g. how the quality of the interaction between coaching and MSMSD can influence player availability and injury burden) (Ekstrand et al., 2019), it was deemed valuable to actively create opportunities for staff to spend time together away from work, which resulted in increased collisions and exposure to each other's areas of interest and expertise (COO 2, PD 14, APD 1, HMP 3) (Grol & Wensing, 2004; M. J. Smith et al., 2013).

Nurturing relationships with external stakeholders was perceived as being equally important for a variety of operational and political reasons. Creating collaborations between relevant external institutions can support the development of internal knowledge and evolution of evidence-based science to inform applied practice, in line with objectives outlined during the strategic planning process. Additionally, building relationships with appropriate members of the sport's governing body, through regular communication and cooperation, can help navigate areas of complexity within aspects of governance (CEO 8, COO 2, COO 3, PD 2, PD 14) (Coutts, 2016; Halson et al., 2019; McCall et al., 2017).

7.5.4 Exploring, Researching, Planning and Preparing for Change

When considering change, it was deemed necessary to follow a clear process of exploration and research. Such a process can be outlined as: define the problem, conduct descriptive research, identify predictors of performance, undertake experimental testing of predictors, determine key performance indicators, conduct efficacy studies to evaluate intervention, examine potential barriers to uptake (including motivations) and then implement studies in real sports settings (CEO 1, CEO 3, GM 2, GM 3) (Malone et al., 2019).

Micro perspectives of change management focus on the psychological impact organisational change has on the people affected by the initiative, considering individual perceptions, coping strategies and the stress imparted on the individuals exposed to the process (Vakola, 2013). Where possible, participants encouraged the development of change initiatives from within the group, with each relevant person being engaged in the undertaking and empowered to take responsibility for owning aspects of the change process. The culture developed should empower people to be creative and permit them to take risks, in the knowledge that, as long as they comply with the beliefs, values and standards of core behaviour established by the group, it is safe to fail. The data indicated that the exception to this approach was when there was not the expertise or desire within the organisation to drive necessary changes internally (CEO 1, CEO 3, CEO 8, MD 1, COO 1, GM 2, GM 5, PD 1, PD 2, PD 12). In the same light, opportunities must be created for people to voice their honest opinions on change.

Ensuring people are focused on the outcome but not attached to one fixed way of operating can be beneficial. Multiple paths can achieve the resolution of the same outcome, and, because problems are multi-dimensional, the sharing of all possible solutions may expose change leaders to ideas they had not previously considered (Reid et al., 2004). In the case of resistance, some leaders underlined the necessity for taking the time to understand the root cause of the resistance and establish whether the negative perception originates through fear, a lack of belief in the viability of the changes proposed or change fatigue. In each instance, it was deemed important to ascertain why the opinion had been formed (CEO 1, GM 1).

Information about the proposed change process should be readily communicated, giving regular updates on process and progress. Information should be delivered using a variety of media and in the language each person understands, being cognisant of the fact that owners, senior executives, managers, coaches, staff and players, will each have different needs relating to the type of information required and learning preferences through which they will digest it (GM 7, PD 13, MDS 2).

The exploration of new ideas should quantify apparent risks and probabilities using decision trees. These were reported to help the evaluation of research by focusing on the process and considering the outcome during review, with an awareness of outcome bias.

Once proposed initiatives have been supported by objective research, risk assessment and positive feasibility studies, the pre-implementation planning process must establish how positive compliance with change is to be visibly and publicly rewarded (CEO 4, CEO 8, GM 2). Additionally, it was recommended that provisions be put in place for providing on-going support for those impacted by change, including identification of the training necessary to develop those with knowledge or skills gaps. It is important to understand and respect that individuals will experience four phases of personal change (1) anticipation and uncertainty (2) upheaval and realisation (3) integration and experimentation (4) normalisation and learning, and therefore, appropriate support must be provided at each stage (CEO 3, PD 2, APD 1) (C R D Wagstaff et al., 2015).

As a leader, there is a need to be cognisant that times of transition provoke vulnerability and require increased vigilance in monitoring group functioning, to ensure that changes are occurring in a considered and manageable way (COO 3). Well-functioning groups were perceived as being responsive to new circumstances and able to restructure over time, but boundaries are required to avoid enmeshing, disengagement and the forming of stable coalitions (HMP 1, HMP 2, DMS 2) (Reid et al., 2004).

Meso perspectives of change management focus on the organisational context of the HPSO and takes into consideration the organisational identity, the institutional processes, the values of the organisation and the overall expectations (Vakola, 2013).

For each planned change initiative, the objectives of the initiative must be in line with those of the department, which in turn must be aligned to the strategic objectives of the HPSO. It is then necessary to identify the most suitable change agents and the most appropriate process of change that will be employed to guide the execution of the initiative. Leaders were recommended to employ principles that embrace and proactively manage the complex nature of the culture (CEO 1, CEO 7, CEO 8). Any planned initiative must follow an objective research process because, whilst innovation is inherently part of high performance, processes must be in place to scrutinise proposed new models and methods through rigorous research (CEO 1, CEO 3, CEO 5, COO 2, GM 3).

Research directed toward the innovation, introduction and improvement of processes must remain collaborative, high quality, be ecologically valid and should blend with servicing where appropriate, supported by an embedded researcher (PD 12) (McCall et al., 2016). Whilst this role is increasing in prevalence, the clear benefits that are provided by such a specialist position are often overlooked and thus these appointments remain rare.

Furthermore, any intellectual property or proprietary systems that are generated throughout the exploration, research, planning and preparation for a change initiative must be retained by the organisation, as must any subsequent systems, processes or products that are eventually implemented. Participants advised that the process should also identify any training requirements that will be required for staff to survive and thrive in the new ecosystem (CEO 3, GM 2, GM 4, PD 2).

Macro perspectives of change focus on the organisational ecology and take into consideration the structure of the company, the organisational inertia, the legal implications, the political landscape and the effects the change process has on the fitness, competitiveness and mortality of the organisation (Vakola, 2013).

In this respect, during the researching, planning and preparation phases, it is important that change leaders in an organisation identify the most appropriate monitoring systems that need to be employed to actively understand and manage the impacts of change.

Additionally, key political senior sponsors of change must be identified, kept informed and clearly understand their responsibilities to regularly and consistently communicate their support for the initiative (CEO 3, GM 2, GM 6, PD 14) (Hiatt, 2006; Hiatt & Creasey, 2012). From an external perspective, the research process must gain a complete understanding of the rules, policies and guidelines that are imposed on the HPSO from external governing bodies, to ensure that each opportunity is explored and governance is respected (GM 2, DBD 1, DBD 2, PD 1, PD 2, PD 8, PD 7, PD 14).

7.5.5 Leading Performance Whilst Implementing and Integrating Change

Leadership of HPSOs, or departments within HPSOs, is a multifaceted role, demanding a unique set of skills, many of which are often novel to new leaders, recruited on the basis of their operational capabilities in a more specific role (Cruickshank et al., 2013; Cruickshank & Collins, 2012b). Most leaders do not have specialised training in the aspects of performance or change management, which they are expected to perform on a daily basis in such roles.

These responsibilities can include, but are not limited to (Robinson & Minikin, 2011):

1. STRATEGIC MANAGEMENT - strategic analysis, organisational diagnostics, organisational structure, role development, benchmarking, formulate mission, vision, objective markers, audit;

2. OPERATIONAL MANAGEMENT -

    a) Governance -   policies, rules, regulation, strategic planning, stakeholder evaluation, ethics, information recording, security

b) Finance - budgets, record keeping, marketing, revenue generation, planning, insurance

c) Communications - methods, technology, responsiveness, stakeholder relationships, (20+ internal and external stakeholders), media, peer networks

d) Operational - Activity performance preparation, performance conditioning, injury risk evaluation and mitigation, performance optimisation, performance analysis, acute injury management, performance recovery, rehabilitation, return to play, non-performance related load management, health and wellbeing (playing, coaching, front office, performance staff), talent development, talent recruitment, talent transition, talent retention

e) Culture - values, beliefs, behaviours, environment, operational philosophy, psychological safety, optimal performance facilitation

f) Education, Dissemination, Research and Development -

identifying pertinent research questions, performance evolution, relationship with external institutions and research partners, using IP to promote health and wellbeing of community, internships, personal development, event management

g) Human Resources - diversity, recruitment policies, disciplinary procedures, talent identification

h) Physical Resources - facilities, equipment evaluation/purchase/maintenance, research;

3. INDIVIDUAL MANAGEMENT - mentoring, coaching, staff development, succession planning, health and welfare, appraisals;

4. LEADERSHIP - vision, communication, creating psychologically safe places, role modelling, creating positive environments, decision making, negotiation, building team cohesion, guarding the culture;

5. CHANGE MANAGEMENT - environmental scans, research, planning, communication, preparation, implementation, integration, audit.

Perhaps the most important aspect of leading performance was perceived to be the need to regularly communicate the vision and core strategic priorities of the HPSO through a variety of media, in order to relate them to the tasks executed by each member of the group.

As the orator and guardian of the culture, stories can provide a powerful tool to illustrate what is important to the organisation, the standards, how it navigates hard times and adversity (Eat Sleep Work Repeat, 2019). This provides a clear understanding as to what is expected from each employee, so they can establish what it is they are responsible and accountable for and how they are connected to the outcome (CEO 8, COO 3, GM 2). Additionally, by orchestrating the identification of a shared profile of beliefs, values and core behaviours, the leader facilitates the creation of a psychologically safe place for people to work, which is inclusive and collaborative whilst promoting risk taking and adaptability. This provides long-term performance benefits (Frontiera, 2010). These components were reported to contribute to an intentionally determined culture, that can be self-regulated by cultural architects and key influencers within the various working groups that comprise the HPSO (CEO 1, CEO 6, CEO 8, GM 3) (Hughes, 2018).

This peer-policed culture should be supported by documents of governance, that reflect an emphasis on creating a positive environment where all employees feel physically safe, personally valued, morally supported, personally and politically empowered and hopeful about the future. Each person should be guided by an individualistic approach and treated with empathy, compassion, support, appreciation and recognised for their unique abilities. Participants recommended that people should be inspired to think broadly, take risks, share ideas and communicate openly (CEO 3, GM 1, GM 2, GM 3) (Reid et al., 2004).

Performance objectivity can be maintained through the employment of internal systems, processes and procedures, that are clearly communicated (avoiding jargon) and understood, with rules of engagement and expectations clearly outlined (Fletcher & Arnold, 2011; Mooney et al., 2017). Systems and processes were considered helpful in retaining quality communications through times of organisational stress, which if not managed could become dysfunctional and lead to poor decision making (CEO 8, GM 2, GM 3, PD 11) (Ekstrand et al., 2019; Fletcher & Arnold, 2011).

Open feedback loop systems should be employed to promote constant research, measurement, regular scheduled feedback, evaluation/audit and revision of the efficacy and value of each aspect of performance. For example, in the performance operations environment, the integrated performance system approach to athlete management should be programmed using athlete training maps, identifying coaches' Key Performance Indicators (KPIs); the physical qualities that underpin them; the tests that predict them; and the exercises that train them.

There was a preference for these to be formulated through group discussion, allied to expert surveys and best available evidence to gain a consensus and then reviewed using open loop systems to refine and improve them as the feedback directs (Turner et al., 2019). However, in dysfunctional organisational cultures, which harbour embedded multi-disciplinary siloes and enable people to shirk accountability, there are significant obstacles to this way of operating, as the leader must model the self-assuredness to promote this approach and educate their team to work in this manner. These cultures are particularly prevalent in North American HPSOs. This process enables the continuous evolution of physical personal improvement plans targeting individual players' physical weaknesses, implemented in collaboration between the technical director, coaches and multiple discipline science and medical services staff at the beginning or end of regular training (SPT 2, PD 14). This allows data-driven decisions to be made about efficacy and waste (CEO 3, COO 2, PD 2, PD 14, PD 15) (Tee et al., 2018; Turner et al., 2019). Such data-driven decisions, allied to evidence-based quantification of apparent risks and probabilities, enable the leader to develop comprehensively informed budgets. These were subsequently deemed valuable for prioritisation of available funds, exploring opportunities to generate revenue to support self-sufficiency and sustainability and confidently pursuing investment in innovative projects (MD 1, GM 2, GM 3, GM 8) (Fletcher & Arnold, 2011).

Data may also be used to identify the need to invest in additional staff and recruitment, which is a key contributory factor in protecting the culture, in addition to widening the range of skills at the HPSO's disposal.

Whilst it is important to recruit those who are able to contribute in a meaningful way to the functioning of the team, it was considered equally important to recruit individuals with highly developed emotional intelligence attributes, that buy-in to the HPSO's "signature experience", relate to the vision and identify with the community's beliefs, values, and core behaviours. Subsequently, it was recommended that the recruitment process engaged different perspectives, exposed different departments to the candidates with whom they may be expected to interact and included objective components to reduce emotionally charged conflict within the selection panel (CEO 1, GM 3, PD 2, APD 1) (Fletcher & Arnold, 2011).

From a staff management perspective, the leader was considered responsible for monitoring and mediating organisational stress. Sports team environments create emotional stressors (relationship or interpersonal issues, physical resource issues, contractual and performance development related issues, organisational structure and logistical issues) for athletes, coaches and support staff (Arnold et al., 2019). Health and wellness monitoring and management systems, including peer support networks, can be useful in identifying sources of emotional labour and managing them accordingly (Hings et al., 2018).

Psychological wellbeing is affected by self-acceptance, autonomy, empowerment, purpose in life, positive relationship with others, environmental mastery, personal growth and as such, these should be reflected explicitly in coaching, mentorship and appraisals (McEwan & Beauchamp, 2014). Individual welfare can be managed by ensuring each team member has access to emotional support, esteem support, informational support, tangible support within the team environment and education (Kim et al., 2019).

Left unchecked, burnout was considered a risk due to high levels of perceived stress, which can affect focus, decision making and job performance (PD 2, PD 10, PD 12, APD 1) (Arnold et al., 2019; Fletcher & Hanton, 2003; Hanton et al., 2012; Leo et al., 2015; Reid et al., 2004).

With regards staff mentoring, coaching and appraisals, leaders should focus on a proactive positive perspective, with respect to strength and value of each team member, as opposed to determining weakness and dysfunctional behaviours (G. Jones et al., 2009). Coaching from one's supervisor and performance feedback impacts engagement, as does perceived supervisor support. This is particularly true, if transformational, coaching and authentic leadership styles are adopted appropriately to support, challenge and develop team members, whilst inspiring and challenging them to look beyond their own personal goals to the delivery of the team's vision (GM 6) (Fletcher & Arnold, 2011). The research suggests that it is most powerful to coach with compassion, eliciting a positive emotional attraction state. This can involve facilitating employees to create a personal development plan, incorporating a personal vision, celebrating small wins, acknowledging effort, praising appropriate behavioural modelling and genuinely recognising good work (Boyatzis et al., 2013; Chan & Mallett, 2011; M. L. Smith et al., 2009).

Participants suggested that employee resilience can be fostered by providing sincere feedback (potentially including 360 views and external assessments provided in both written and verbal formats) and sharing opinions regarding areas in which each team member has improved (CEO 1, CEO 8, PD 12, APD 1) (Kim et al., 2019).

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Leaders are known to positively influence those around them by using techniques of persuasion, leveraging credibility, providing incentives, emotional contagion, modelling valued behaviours and enabling others to act with autonomy (Chan & Mallett, 2011). Furthermore, the research suggests that the relationship with one's supervisor is directly related to one's level of engagement and so it is important to establish clear lines of communication to ensure quality and quantity of contact time, prioritising face to face, then phone calls, then texts, then emails but also newsletters to ensure that each person has all the information they require to operate effectively (G. Jones et al., 2009). For a leader in an HPSO, there was deemed to be a great deal of benefit in spending time with, not just those who report directly in to you, but finding ways to connect to all stakeholders on a daily basis, asking how they can better be supported in achieving their goals and monitoring their welfare. It was reinforced that by acknowledging those relationships from the bottom up (performers and support staff), a leader should not neglect: the interests of; power dynamics between; and interactions with those from the top down (board of directors, owners) and also from lateral influences, including the media, or even fans where appropriate (CEO 4, CEO 8, MD 1) (Cruickshank & Collins, 2012a; Fletcher & Arnold, 2011).

Signalling Theory illustrates that employees derive great benefit from the clear delineation of roles and responsibilities, the clear communication of task responsibilities and an understanding as to what is expected of them, how they are valued and how this aligns with the overall vision of the organisation. This was seen as especially important in larger groups (PD 14) (Reid et al., 2004).

Subsequently, KPIs for individuals should be based upon their ability to affect change through process and adhere to the department's agreed citizenship behavioural guidelines in line with the desired culture, as opposed to being aligned with game outcome or athlete parameters (CEO 3, PD 2, PD 11) (Hedge et al., 2002; Molan et al., 2019).

Given that so much in sport is uncontrollable, unpredictable and impacted by luck, leaders must model resilience, to allow flexibility during challenging times. By ensuring that the environment provides psychological safety and that each team member feels valued and appreciated, no matter what the outcome of their best efforts and best intentioned risks, leaders will be able to connect their groups at times of pressure, before and after critical events (Eat Sleep Work Repeat, 2019). By fostering this connection between people throughout the organisation and relating how the journey the group undertakes together contributes to writing a new chapter in the legacy of the HPSO, leaders can elevate group identity to one that is bigger than each individual's identity. This was considered powerful in galvanising a collection of individuals despite the uncertain futures that sports permit (CEO 4, PD 2, APD 1) (Daisley, 2019).

7.5.6 Assessment and Evaluation

Once changes have been implemented and integrated and the new leadership regime has been assimilated, it is important to continually monitor, assess and evaluate how performance is developing. Systems monitoring should track both internal and external conditions alongside each other, as resources, personnel changes, policy changes and political events can all influence outcomes in unexpected ways.

Tracking a team's progress towards its vision, mission and objectives, in order to establish whether it is on the right track, efficiently following through with process goals and the plans are providing results, can help identify mistakes, guide appropriate and timely adjustments in response to changing internal and external demands, whilst encouraging patience. Throughout this process, it was considered important to primarily evaluate decisions, strategy and quality of action, whilst not being overly influenced by outcome (CEO 1, CEO 3, GM 2, GM 7) (Cruickshank & Collins, 2012b; Fletcher & Arnold, 2011; Schroeder, 2010).

It is necessary to be inclusive of all feedback and participants advised that people need feedback delivered in different ways. For example, more academically minded people prefer formal dissemination, whereas practitioners prefer informal means, such as one on ones and infographics (Malone et al., 2019). The reaction to feedback can vary individually too, with some people fearing evidence-based research and data points, as they perceive these could expose a weakness in current knowledge base. To this end, it was deemed necessary to use appropriate language and avoid jargon or academic terminology, which can be a huge barrier to coach engagement (PD 15, APD 1) (Martindale & Nash, 2013).

Just as with the development of the group, it is also necessary to track the development of the athletes with which the group are working. Predictive power allows classification at an individual level, with a good level of accuracy to identify whether an athlete may perform well, obtain a contract, or risk sustaining injury. Explanatory power can help identify a population who may perform well, develop into a talent, or be susceptible to injury and thus seen to direct the implementation of specific tests or monitoring tools.

It is necessary to ensure that the evidence is correctly interpreted to establish which research is providing predictive power, as opposed to which is providing explanatory power and to this end, employing the services of a biostatistician can be of value (RD 1, DMS 1, DPR 1, HPT 1, HSC 3, HSC 4, HAT 1) (Dijkstra et al., 2014; McCall et al., 2017; Mujika et al., 2018; Smolianov et al., 2016; Sotiriadou & De Bosscher, 2018).

7.5.7 Adjustments

The dynamics of the group and quality of the relationships within it contribute considerably towards how the organisation is able to respond to feedback and the findings of ongoing evaluation. The most constructive way for groups to respond was reported to be when the team leads the process of self-correction. This involves the members diagnosing the problems and developing effective solutions themselves. This approach requires collaborative group discussion to identify potential alternatives, appropriate solutions and implement them as required. If the feedback highlights that individual members of the team are being overloaded, the recommendation was that the group needs to provide back up, in the form of assistance from colleagues, redistribution of tasks, or providing resources as required (PD 2, PD 6, PD 12, PD 14, PD 15) (Mach et al., 2010).

It was considered to be important for leaders to be proactive in ensuring that intra-team coaching is provided in the form of constructive feedback, mentoring from within, and where necessary, confronting members who break group norms (CEO 1, CEO 3, GM 2, PD 2, PD 13) (McEwan & Beauchamp, 2014).

From the performance operations perspective, it was seen as imperative that regular opportunities for dialogue between coaches and sports scientists are provided, in order to help them collaborate in targeting needs effectively and thus contribute to applying specialist knowledge in a way which is relevant and effective across the pathway. It's crucial that the scientists understand the needs within a sport fully before applying their specialist knowledge (PD 14, DPD 1, ADPD 1, APD 1) (Drust & Green, 2013; Glazier, 2017; Martindale & Nash, 2013; Sotiriadou et al., 2017).

7.5.8 Personal Health, Well-being and Performance

One area that is often overlooked in the high-performance sports world is self-care. Leaders have a responsibility to ensure they are in the best condition possible to make critical decisions under pressure, lead a group of people with energy and optimism and manage their emotional regulation, so as not to allow situations or opinions to have a controlling affect (PD 2, PD 12, PD 14). Whilst in the previous sections, the author's reflections on many years of working in HPSOs have been assimilated alongside the accumulated evidence-based research, data points from semi-structured interviews and informal conversations, this section is based solely on such reflections.

From a lifestyle perspective, it is imperative that a leader of an HPSO or department within an HPSO ensures that strategies are in place to maintain physical and mental health and wellbeing. It is easy to get absorbed and swept away with the fast pace of such environments, however, whilst there is often little formal support automatically provided to those in leadership positions, a leader's performance will suffer just the same as any player or coach.

The author notes that at times where he did not intentionally timetable regular exercise, sleep and good dietary habits into his calendar, his performance suffered. It is important to ensure that there is time for psychological space, allowing a leader to switch off and be anything other than a leader in an HPSO. The author's personal strategies include practising yoga, meditation, high intensity exercise in group settings, improv comedy and youth mentorship. These activities have helped avoid burnout and maintain motivation, despite their contributions being hard to measure objectively.

Personal reflection has been a necessary aspect of the author's professional development, involving the continued identification and improvement of areas important when one is aspiring to be a good leader. Working with mentors and coaches to discuss experiential learning points, make sense of adversity, develop emotional intelligence, encourage objective thinking, enhance communication skills, improve confidence and foster self-awareness have all been valuable experiences.

These exercises have ensured that learning became a treasured outcome of challenging times. As a leader, being able to recount stories about lessons learnt in a real way, which express humanity, flaws and vulnerability, is a valuable asset. On reflection, the worst memories are often the best ones to remember, enabling failure to become the best teacher, when the lessons are learnt and meaning is made of what happened, in addition to how one reacted.

There are times in high performance sport that personal ethics and morals will be challenged and consequently, leaders should be conscious about what their personal values, beliefs and philosophies are. Retaining a growth mind set and being curious about oneself and how one interacts with the world in alignment with those values, is necessary to perform appropriately under pressure, retain motivation and continue one's personal and professional development.

7.6 Conclusion

Leadership of HPSOs, or departments within HPSOs, is a multifaceted role, demanding a unique set of skills, many of which are often novel to new leaders, recruited on the basis of their operational capabilities in a more specific role (Cruickshank et al., 2013; Cruickshank & Collins, 2012b). Most leaders do not have specialised training in the dimensions of performance or change management, which they are expected to perform on a daily basis in such roles.

This document combines: the latest current peer reviewed research, concerning dimensions of performance and change management; the findings of semi-structured interviews conducted with CEOs, presidents, sporting directors and general managers of HPSOs from around the world; the summation of reflections from informal conversations with executives and senior leaders of HPSOs from around the world; and the reflections on the author's unique experiences of over 20 years in high performance sport.

The culmination is an outline of what leaders in HPSOs can expect to encounter in the current climate, and a practical guide to inform how one can face the multitude of challenges that may present in those environments.

Chapter 8: General Summary and Conclusions

8.1 Introduction

By definition, high performance sports organisations (HPSOs) in the 21st century, are those organisations that operate at the "top end of sport development and encapsulate any athlete or team that competes at an international or national level", thus demonstrating their expertise, whilst operating in a "fast paced, highly dynamic environment" (Sotiriadou & De Bosscher, 2018).

The sports sector has now entered a phase of post-commercialisation and is one of the most hyper-commodified industries globally, estimated to be worth nearly $488.5 billion in 2018, having grown at a compound annual growth rate (CAGR) of 4.3% since 2014. The predicted continuation of growth acceleration, to nearly $614.1 billion by 2022 (Business Research Company, 2019), creates an environment defined by volatility, uncertainty, complexity and ambiguity, as multiple stakeholders demand results related to performance, entertainment and financial profit (Millar et al., 2018). Consequently, HPSOs and their leaders are now being faced with novel challenges to meet, in order to survive and thrive in the new landscape.

Nothing has served to underline these novel challenges as starkly as the influence that the 2020 outbreak of COVID-19 has had on the global community. Whilst it is too early to evaluate the magnitude of the impact it will have on the international sporting ecosystem, we can anticipate that such a defining episode for a generation, will have a significant disruptive effect.

Whilst HPSOs will have to re-evaluate their strategic objectives to manage severely disrupted financial projections, they will also play an important part in healing the socio-cultural aspects of life, as their return to competition will be perceived as a "return" to the "normal pattern" of living.

8.1.1 Defining Markers of Success

In order for any business to achieve long-term development and sustained success, it is necessary to identify the sporting, economic, environmental, cultural and social objective markers that contribute to reaching this standard (Waśkowski, 2015). However, when defining these markers, leaders must be cognisant of the vested interests held by the complex network of internal and external stakeholders, as to how, and with what result, the HPSO functions (Friedman & Miles, 2002).

In interrogating the annual reports, strategic plans and impact reports of some of the most successful HPSOs in the World and cross-referencing them with current peer-reviewed and industry research, there are clear verticals that justify inclusion in the strategic planning of objectives, in addition to ongoing measurement and management. These can be summarised as the outcomes of the various sporting teams as aligned to their respective goals; knowledge development and dissemination; social impact; brand development; global business growth; telling the story of the heritage; support services undertakings; and markers of economic health (Borussia Dortmund, 2019; City Football Group, 2019; FC Barcelona, 2015, 2019; Juventus, 2019a, 2019b; Real Madrid, 2019a, 2019b).

Whilst the priority of each vertical may vary for each HPSO, depending on the size, geography and ecosystem in which it operates, it is clear that neglecting any one of these verticals will impact its ability to achieve optimal long-term development and ongoing success.

8.1.2 Satisfying the Changing Demands of the External Stakeholders

This expansive nature of operations observed in HPSOs, requires leaders to continually consider the relationship between the various interactive components of each vertical, in a uniquely fluid environment (Millar et al., 2018). Such management involves the ongoing measurement, assessment and evaluation of each variable, with subsequent change and innovations being managed concurrently, incorporating a cognisance as to how these relate to each of the stakeholders (Cruickshank & Collins, 2012a).

When considering how an HPSO must change to stay relevant in a continuously evolving ecosystem, it must seek to understand the demands of its external stakeholders, such as fans, corporate partners, sponsors, members of its local and global community and customers (Brand Finance, 2019). Such relationships require two-way interactions for both communication and power flow, whilst for the current generation, the importance of total societal impact (TSI) provides a conduit for communication and symbiosis (Dahlstrom & Goland, 2018; Mennel & Wong, 2015).

Subsequently, finding the most appropriate framework to facilitate the incorporation of TSI into an organisation's strategic objectives, enables the HPSO to future proof its operations and instil flexibility into the foundations of the mission.

Research also suggests that such an approach serves to increase revenue and company valuation (Beal et al., 2017). One such vehicle that provides a balance between earning profit and serving purpose is the B Corporation framework, which supports the organisation in addressing its impact on the environment, community, employees, whilst evaluating its own governance statutes and the ethical practices of its stakeholders (B Lab, 2018; Grimes et al., 2018; Livingston, 2012).

8.1.3 Satisfying the Changing Demands of the Internal Stakeholders

One of the most prominent effects of sports hyper-commodification, has been an increased investment in high-performance sport from external stakeholders. However, given the increased profiles and demands upon teams and athletes, sport's post-commercialisation has resulted in the dramatic rise of player wages. In 2019, teams from 18 leagues, in 8 major sports, paid their athletes $22.6B, in contrast to $15.75B in 2013 (Sporting Intelligence, 2013, 2019). Consequently, investment in player care by HPSOs has escalated, as they seek to protect and add value to their most prized assets. This has increased the level of scrutiny in the areas of athlete health, wellbeing and performance, thus prompting HPSOs to undertake significant change initiatives that affect a number of their internal stakeholders (Hägglund et al., 2016; McCall et al., 2016; McCalla & Fitzpatrick, 2016; Orchard, 2009).

Multiple-discipline science and medical services departments (MSMSDs) have become the norm in HPSOs from Europe to Australasia since the 1990s, and are now increasing in popularity in North America (J. Smith & Smolianov, 2016).

However, given the traditional structures and cultures of many HPSOs, the introduction of MSMSDs represents significant internal change that requires careful management (Gillett, 2014; Press Association, 2017).

These complex tasks of management require a specialised mix of hard skills related to change management, strategic and operational performance management, allied to soft skills related to people management and leadership (Cruickshank & Collins, 2012a). However, performance directors recruited into these roles, rarely have the necessary training or experience required to undertake these responsibilities without organisational support (Malcolm et al., 2017; I Waddington, 2001).

Organisations and their leaders must recognise the changing demands of managing in HPSOs and provide the necessary education, in the form of executive coaching and mentoring. Failing to do so will risk exposing teams to poor management in critical areas, which can quickly lead to siloed environments of multi-disciplinary working, as opposed to ecosystems demonstrating interdisciplinary and transdisciplinary collaboration (Choi & Pak, 2008, 2006, 2007). Such conditions create organisational stress, emotional labour, burnout, staff turnover, resistance to change and breakdowns in communication, which have been shown to impact athlete and team performance (Arnold et al., 2019; Ekstrand et al., 2019; Kim et al., 2019; Malone et al., 2019; Reid et al., 2004).

8.1.4 Change Management

Subsequently, change and innovation have become defining aspects of performance, as each organisation seeks competitive advantages in the quest for attaining sustained success in relation to performance and financial profits, achieved both inside and outside the arena of play. However, the implications of undertaking change initiatives, which are inherently proven to be risky pursuits, must be carefully considered, as most change initiatives fail to achieve their goals (Ashkenas, 2013), whilst concurrently producing high opportunity and process costs, which can seem to outweigh the benefits of the change itself (Jacobs et al., 2013).

In order to increase the probability of success and reduce the risk of failure when undertaking change, each initiative must be assessed, researched and planned in relation to the various impacts it will have, both throughout the change process and once the initiative has been integrated into the environment (Al-Haddad & Kotnour, 2015; Ashkenas, 2013; Burnes, 1996; Jacobs et al., 2013; Rafferty et al., 2013).

To ensure that these impacts are understood at the individual level (Elias, 2009; Piderit, 2000; Rafferty & Jimmieson, 2017; Reichers et al., 1997), how they will influence the internal dynamics of the organisation (Abrell-Vogel & Rowold, 2014; Burnes & Jackson, 2011; Cruickshank & Collins, 2012a; Gilmore & Sillince, 2014; Christopher R D Wagstaff et al., 2016) and how they will determine how the organisation interacts with its wider environment (Burnes, 2004; Rafferty et al., 2013; Soebbing et al., 2015), leaders must understand the micro, meso and macros aspects of change management (Vakola, 2013).

8.1.5 Performance Management

The ongoing leadership demands of HPSOs and departments within HPSOs, extend beyond change management to incorporate aspects of performance management (Molan et al., 2019; Robinson & Minikin, 2011). These responsibilities are critical for creating the culture within which everyone operates and the systems and processes by which everyone operates.

The first set of dimensions relate to strategic and operational performance management, which require 'hard skills' such as strategic analysis, organisational diagnostics, intentional creation of cultural boundaries (including defining the vision, mission, goals, core standards of behaviour, values and belief systems), budget planning, governance documentation, human resource planning and overseeing facility management (Molan et al., 2019; Robinson & Minikin, 2011). The second set of dimensions relate to individual management and leadership, which require a set of 'soft skills', including communication, mentoring, coaching, negotiation, conducting appraisals, giving feedback, decision making, role modelling and creating positive environments which promote psychological safety (Arnold et al., 2019; Ekstrand et al., 2019; Fletcher & Arnold, 2011; Hanton et al., 2012; Kim et al., 2019; Reid et al., 2004).

8.1.6 Environmental Scan

From the investigations conducted in Chapter 5 and Chapter 6, it is apparent that HPSOs demonstrate a bias towards either models of emergent change, whereby change is continuous and unpredictable, with various initiatives undertaken concurrently (Burnes, 2004; Tsoukas & Chia, 2002), or models of change experiencing punctuated equilibrium, whereby long periods of stability are disrupted by short periods of fundamental change (Burnes, 2004; Nissen, 2016; Romanelli & Tushman, 1994).

HPSOs that demonstrate the instability that characterises the early stages of evolution following a change in ownership, or reactive leadership that is heavily influenced by short-term results, describe environments that are biased towards a model of emergent change (Burnes, 2004; Tsoukas & Chia, 2002). Their preference was to lead change using a top- down approach, with senior leaders or owners deciding on which change initiatives would be undertaken. However, given the labour intensive demands of driving change initiatives, this often resulted in a lack of adequate sponsorship, poor communication and a lack of patience in seeing the initiative through the 'messy middle of change' (Kanter, 2009). As a result, these HPSOs often reported powerful resistors to change, change fatigue and environments that did not support taking risks and learning from failure (Hiatt, 2006; Hiatt & Creasey, 2012).

HPSOs whose leaders formulate a clear vision and mission, guided by a strategic plan and directed by process-orientated objectives, describe environments that are biased towards a change model of punctuated equilibrium (Burnes, 2004; Nissen, 2016; Romanelli & Tushman, 1994). Rather than reacting to short-term results, these organisations trusted in their long-term plan and reviewed the progress according to a variety of objective markers. Their preference was to encourage change to develop organically, from within the departments that had identified the necessary innovations and to support initiatives as required with sponsorship, resource and patience, once the evidence-based research and strategic plan had been presented. These HPSOs were process-driven in their implementation, integration and review of change, with initiatives aligned with strategic goals and, subsequently, change was more likely to achieve the outcomes envisioned.

8.1.7 Practical Management of Change and Performance Dimensions

To draw a conclusion from the peer-reviewed research on change and performance management, whilst considering the opinions of executives and senior leaders in the field, and the observations made by the author during his experiences of leading change in high- performance sport, it is that a clear plan, which considers all of the factors informing the roles and responsibilities of each leadership position, is a valuable resource for those leading HPSOs (Collins & Cruickshank, 2012; Cruickshank et al., 2014; Cruickshank & Collins, 2012b).

Whilst the peer reviewed research is limited when relating change and performance management to HPSOs, there is a recognition within the industry that the landscape is constantly changing, demanding that leaders must adapt and evolve to keep themselves and their organisations at the forefront of practice. Taking the time to critically evaluate the task demands which comprise each individual context and personally reflecting as to where training and support is needed, will prove to be a valuable exercise for leaders and those to whom they report (Cruickshank & Collins, 2012b; Eubank et al., 2014).

Whereas some leaders are biased towards the hard skills of change, strategic and operational performance management, others may be more comfortable with executing the soft skills associated with individual and leadership management. Appropriate personal development can change this profile (Boyatzis et al., 2013; M. L. Smith et al., 2009). Additionally, such reflections can be used to guide recruitment decisions, enabling leaders to employ assistants or middle management staff to fill a skills gap.

By taking this proactive approach to improving leadership in HPSOs, not only will the health, wellbeing and performance of employees be enhanced, but the sporting, economic, social and environmental impact of organisations will be improved. Attaining objective markers that reflect positive change in each of these areas of HPSO operations, will contribute to the aim of achieving sustained success (Collins & Cruickshank, 2012; Cruickshank & Collins, 2012a; Fletcher & Arnold, 2011).

8.1.8 General Summary

Given the qualitative nature of the data collected during the semi-structured interviews and informal conversations, it is not possible to objectively define the outcomes achieved as the result of adopting specific leadership approaches. Additionally, the impact that one leader has on an entire organisation cannot be objectively quantified, in order to establish the causative effect one person can have on the overall success of their HPSO. However, the subjective findings extracted from the overarching themes, suggest that the leaders of successful teams adhere to the systems and processes aligned with the vision, mission and strategic goals of the organisation, as opposed to being guided by short term results.

In addition, they intentionally create a values-based culture that supports open communication/sharing of information and serves to develop an environment that models psychological safety, which promotes the generation of ideas throughout the organisation and grants the permission to take risks & take accountability without attributing blame for failure.

The analysis of qualitative data also prohibits the calculation of an objective weighting system, to assign a ranking of which qualities and skills are more important in a leader, or of which change management perspectives have greater or lesser impact on different parties (individuals vs within organisations vs organisations within environment). However, what can be inferred from the interviews and informal meetings, is that successful teams are adept at covering all bases in both performance and change management.

This is rarely, if ever, through the qualities of one person. Moreover, the most successful leaders understand the demands of their role; recognise their signature strengths; acknowledge where they fall short; recruit assistants and team members who are strong in these attributes; and then empower them to lead in those areas. To that end, my observations would suggest that the most valuable skills required to enable a leader to thrive, would be those related to the individual and leadership performance dimensions. Leaders demonstrating these attributes are more likely to ensure that all the necessary skills are represented within their team and then be able to mobilise them in service of the organisation's vision.

8.2 Future Research

8.2.1 Systematic Review

Further to the research detailed in the systematic review, could adapt and expand upon previous investigations into the management of change and performance dimensions by performance directors of Olympic HPSOs and head coaches of professional HPSOs. It would be valuable to understand the challenges faced by leaders of MSMSDs in HPSOs, as well as understanding how employees at other levels of such organisations are impacted by the managerial practices of those in the leadership roles.

Future quantitative studies should evaluate the efficacy of HPSO leadership, in addition to that of the various structures, systems and processes of the MSMSD models proposed and theorised in the opinion and anecdotal literature.

Quantitative assessments of leadership efficacy can be related to staff turnover and measures of burnout in response to the presence of organisational stressors and the emotional labour that is subsequently required to manage them. Additionally, progress against the metrics identified in each HPSO's mission statement, which serves to supports the overall organisational vision, will provide data as to how performance in each aspect of the HPSO is being driven by the leader responsible for each vertical.

Given the research that has demonstrated the significant increase in injury burden and incidence of severe injuries when low quality communication exists between the head coach and the medical service professionals, it would be useful to expand this research to sports other than soccer (Ekstrand et al., 2019).

Additionally, establishing objective outputs in other areas of HPSOs that are also affected by the quality of communication, trust and employee support would help predict how a particular HPSO is likely to manage change initiatives and achieve sustained success (Baldoni, 2009; Covey & Conant, 2016; IBM Smarter Workforce Institute, 2018; Johnston et al., 2007)

8.2.2 Qualitative Data Collection Studies

Future research should include a greater number of subjects, with several operating in the same sport and hailing from similar backgrounds. This would enable a more informative environmental understanding using a wider range of participants operating in different environments and cultures.

The majority of the research in this thesis has been qualitative in nature, and as a result has precluded cross-matching leadership approaches to change and performance management, to teams ranked in order of relative success achieved. This is a complex task and would require a mixed-methods approach, incorporating a within league comparison, where standardised markers of team success could be compared. Additionally, this would have to take into consideration the presence and lifespan of institutional philosophies, in relation to change and performance management, that could have contributed to both current and historic success or underperformance in any one of the 8 operational verticals identified in Chapter 2.

Given the interest demonstrated within the current research in relation to cultural and sporting differences, it is recognised that the studies undertaken were unable to draw inferences relating to cultural or sporting differences. Consequently, there would also be value gained from research employing a mixed-methods approach that matched teams within the same sport but across different countries, to compare how teams achieving sustained success and those perennially underachieving, managed change and performance dimensions. This would allow for cultural comparisons and increase understanding as to how leaders operating in different countries need to adapt their approach to leadership. By repeating the same methodology but with teams from different sports within the same country, sporting comparisons could be made, whilst comparing the diversity within respective teams in relation to the nationalities and non-sporting, or non-same sporting, backgrounds of support staff would increase an understanding as to the relevance of a variety of cultural factors. These would increase understanding as to how leaders operating in different sports need to adapt their approach to leadership.

The findings of the studies conducted throughout this thesis are based on data acquired from interviews with individual participants, each from different HPSOs. Expanding the research to compare how people at different levels of seniority (e.g. executive vs senior leader vs middle manager vs junior staff member), within the same organisation were able to impact and were impacted by change, would also be valuable. This would increase the understanding as to how different approaches to managing change and performance affect organisational stress, emotional labour and appetite for change at each stratum of an HPSO.

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Appendix

A.1 Search Strategy

Broad subject headings and text words were used as keywords and phrases for the database search in relation to MSMSDs. Electronic search strategies were created and conducted by researchers experienced with systematic reviews of the literature. This involved:

i) identification of keywords related to the research question;

ii) conducting preliminary searches, assessing search returns for relevance;

iii) selection of relevant search returns in each database, mining for widely used alternative keywords;

iv) selection of final keywords and compiling Boolean search strings for each database (see Table A1.1).

Table A1 Example search: Web of Science database search (27 August 2019)

DATABASE	BOOLEAN STRING SEARCH TERM	RESULTS
Web of Science	TI=(sport OR high performance sport OR elite sport) AND TI=(sports science OR sports medicine OR human performance OR interdisciplinary medicine and science OR holistic performance OR multidisciplinary performance OR science and medicine OR high performance OR medical services OR exercise science) AND TI=(team OR department) OR TS=(sport OR high performance sport OR elite sport) AND TS=(sports science OR sports medicine OR human performance OR interdisciplinary medicine and science OR holistic performance OR multidisciplinary performance OR science and medicine OR high performance OR medical services OR exercise science) AND TS=(team OR department) *AND* LANGUAGE: (English) *AND* DOCUMENT TYPES: (Article)	2,445

A.2 Study Selection

All studies identified through the search were screened separately by two reviewers, using a multi-step process established by the Preferred Reporting Items of Systematic Reviews and Meta-Analyses (Moher et al., 2009). The number of articles excluded at each level of screening was recorded (see Figure 4.1). Reviewers were not blinded to author names or journal titles during the screening and study selection process.

Step 1: Preliminary Screening - internal and external duplicate citations were removed from the compiled citation list. Studies were then screened based on journal title only, to exclude citations obtained from sources other than peer reviewed journal articles. Remaining results were then assessed by article title only, to exclude titles not containing any reference explicitly, or implicitly, to MSMSDs operating in HPSOs.

Step 2: Title & Abstract Screening - remaining articles were screened by title and abstract, using the eligibility criteria (see Figure 4.1). In the event of indecision, the second reviewer would discuss the relevant article until consensus was achieved and decision upon inclusion was reached.

Step 3: Full-Text Screening - full-text versions were obtained for the all articles deemed to meet the criteria of the systematic review and a full-text screening was undertaken. All reasons for article exclusion during this stage of the process were recorded. Cross-referencing of the reference lists was conducted to identify articles omitted from the screening process.

All citations and related electronic versions of the articles, where available, were downloaded into an online research management system (Endnote; Clarivate Analytics, Philadelphia).

A.3 Data Synthesis

The three-stage thematic synthesis process (Thomas & Harden, 2008) conducted adhered to the following steps:

Step 1: Coding Text

Full text hard copies of each study were read and reread to identify key components of change management and related performance dimensions in MSMSDs operating in HPSOs. In studies reporting quantitative outcomes, findings correlating with change management or performance management dimensions were identified as key factors and extracted as reported in the study findings (Molan et al., 2019).

In studies reporting qualitative data sets, key themes associated with change management perspectives and related performance management dimensions in MSMSDs operating in HPSOs, as interpreted by the original authors, were extracted as raw data to ensure analysis retained consistency with the original studies' findings (Thomas & Harden, 2008).

Step 2: Developing Descriptive Themes

Factors identified in Step 1 were grouped with others portraying similar meaning, to construct 'descriptive themes'.

Step 3: Generating Analytical Themes

Descriptive themes were presented and discussed under higher level 'analytical themes', based on current theoretical conceptualizations of change management perspectives and related performance management dimensions.

A.4 Data Extracted from Reviews

Table A2 Findings from identified systematic reviews

REFERENCE	CONTEXT	MSMSD COMPONENTS	MSMSD LEVELS	KEY FINDINGS
Arnold, R., Collington, S., Manley, H., Rees, S., Soanes, J. & Williams, M. (2019) "The Team Behind the Team": Exploring the Organizational Stressor Experiences of Sport Science and Management Staff in Elite Sport.	Elite sports organizations (athletics, cricket, cycling, soccer, rugby union, tennis, triathlon)	Sport science, PD, S&C & physio perspectives & responses to org stressors	PM: Operational, Individual, Leadership	Sports science & management staff in elite sport encounter range of relationship & interpersonal stressors relating to 1) staff & communication, feedback & expectations; 2) resource stressors including management of large amounts of data; 3) contractual issues & performance development 4) organizational structure (including gender dominance) & logistics; consequences of stressors are negative emotions & outcomes related to performance, mental health & well-being; employers have a duty of care to their employees
Carson, H.J., Collins, D. & Jones, B. (2014) A case study of technical change and rehabilitation: intervention design and interdisciplinary team interaction.	Elite weightlifting	Collaborative work to manage diagnosis, analysis, rehabilitation of injury & subsequent technical retraining	PM: Operational	Interdisciplinary team approach, with clearly defined roles & responsibilities relating to skill acquisition/motor control, sport psychology & coaching, athlete made final decisions on intervention, which included systematic use of multiple tools to facilitate technical change in skills, coupled with positive psychological change, which resulted in improved self-efficacy
Ekstrand, J., Lundqvist, D., Davison, M., D'Hooghe, M & Pensgaard, AM. (2019) Communication quality between the medical team and the head coach/manager is associated with injury burden and player availability in elite football clubs.	Elite European soccer	Intra-team communication	PM: Operational, Leadership	Injury burden & incidence of severe injuries were significantly higher in teams w/ low quality of communication btw head coach & medical team, compared w/ teams with moderate or high quality scores; teams w/ low scores had 4-5% lowers training attendance & less availability at matches compared w/ teams w/ moderate or high communication quality scores

REFERENCE	CONTEXT	MSMSD COMPONENTS	MSMSD LEVELS	KEY FINDINGS
Elphinston, J. & Hardman, S.L. (2006) Effect of an integrated functional stability program on injury rates in an international netball squad.	Elite netball	Intra-team collaboration to audit injury presentations, reflect & evaluate contributing factors, research & strategize appropriate interventions & re-audit	PM: Operational	Reactive single disciplinary sports medicine system, demonstrated poor player self-responsibility & inadequate player understanding of the anatomy & biomechanics of sound training, inadequate screening procedures & perceived conflict between sports science & sports medicine personnel; revised MSMSD structure, promoted delineation of roles aligned to a common purpose; new processes included functional profiling, informing MDT strategy comprising foundation, transitional, prophylactic & sport specific session; training compliance increased, interdisciplinary conflict decreased, rate of injury was reduced incl. no training or overuse injuries, whilst physiological performance markers improved, relating to increased confidence in & commitment to training
Gamble, R., Hill, D.M. & Parker, A. (2013) Revs and Psychos: Role, Impact and Interaction of Sport Chaplains and Sport Psychologists within English Premiership Soccer.	Elite soccer	Integration, collaboration & referral btw psych & chaplain	PM: Operational	Poor role clarity & subsequently poor collaboration & referral btw sports psychologists & chaplains, which contributed to limited impact of both professions in the sport due to perceptions related to role & impact, synergies, schisms; identified limitations in sport psychology training to prepare professionals for working in professional soccer
Gilmore, S. & Sillince, J. (2014) Institutional theory and change: the deinstitutionalization of sports science at Club X.	Elite soccer	Development of MSMSD, relationship with coaching & administration, succession planning, cohesion	PM: Strategic, Operational, Leadership CM: Micro, Meso, Macro	Institutional entrepreneurs head coach, head of science & medical services, performance coach) established MSMSD to combat lack of funds for playing staff; MSMSD practices relied on secrecy & inimitability; success built on social complexity creating a positive, happy creative environment; institutionalization occurred over 4 years; deinstitutionalization precipitated departure of institutional entrepreneurs, associated with no succession planning resulted in appointment of new head coach who was not aligned with previous philosophies & did not understand MSMSD work, thus subsequently employed staff he had previously worked with, that had different philosophical approaches; subsequent destabilization of the emotional environment & disruption to community of practice resulted in deinstitutionalization of sports science

REFERENCE	CONTEXT	MSMSD COMPONENTS	MSMSD LEVELS	KEY FINDINGS
Gustafsson, H., Holmberg, H.-C. & Hassmén, P. (2008) An elite endurance athlete's recovery from underperformance aided by a multidisciplinary sports science support team.	Elite cross-country skiing	MDT collaboration to provide a comprehensive set of performance tests	PM: Operational	Effective interdisciplinary collaboration in the MSMSD related to effective monitoring of training & recovery
Hägglund, M., Waldén, M. & Ekstrand, J. (2016) Injury recurrence is lower at the highest professional football level that at national and amateur levels: does sports medicine and sports physiotherapy deliver?	Elite European soccer	Limited access to private physio/medical vs access to full-time physio & PT doc vs access to FT physios/medics/sports science/S&C	PM: Strategic, Operational	Of all injuries, 18.8% were recurrent injuries, of which 14.9% were early recurrences & 3.9% were delayed recurrences; recurrent proportions were higher in second half of season for all cohorts; recurrence proportions were higher in amateur cohort (35.1% - relying on consultancy & self-referred injury management), followed by Swedish elite cohort (25% - relying on single discipline full-time injury management) & lowest in the elite cohort (16.6% - with MSMSD injury management) despite highest exposure; decreasing recurrence trends were observed in elite European & Swedish elite cohorts
Hings, R.F., Wagstaff, C.R.D., Anderson, V., Gilmore, S. & Thelwell, R.C. (2018) Professional challenges in elite sports medicine and science: Composite vignettes of practitioner emotional labour.	Elite sports organizations (cricket, golf, soccer, rugby union, swimming, triathlon)	Emotional labour, regulation & awareness in sports med & sci staff in elite sports settings	PM: Operational, Individual, Leadership

CM: Macro | MSMSD staff face complex professional challenges that demand significant, complex & varied enactment of emotional labour to navigate when coping with disparity between training & personal emotions vs morals, codes of conduct & performance expectations in work settings; findings identify responsibility of professional societies, regulatory bodies, educators & employers to understand & identify skills required to operate effectively in HPSOs |

REFERENCE	CONTEXT	MSMSD COMPONENTS	MSMSD LEVELS	KEY FINDINGS
Larner, R.J., Wagstaff, C.R.D., Thelwell, R.C. & Corbett, J. (2017) A multistudy examination of organizational stressors, emotional labour, burnout, and turnover in sport organizations.	Elite sports organizations (athletics, hockey, cricket, soccer, netball)	Organizational stressor experience & related burnout, turnover intentions & turnover in sports performers, coaches, PDs & med/sci staff	PM: Operational, Individual,	Surface Acting (SA) = individuals display org desirable emotional expressions regardless of emotions they're experiencing; Deep Acting (DA) = individuals consciously modify feelings to express expressions (more positive outcomes); SA > depressive symptoms & burnout,> withdrawal thru high emotional labour & therefore can contribute to increased turnover due to emotional exhaustion & dissonance; SA moderated relationship btw frequency of organizational stressors & burnout in sport; SA was an important mechanism thru which burnout mediated relationship btw frequency of stressors & turnover intentions; SA moderated relationship btw org stressor frequency & turnover intentions but not actual turnover; this identifies potentially negative emotion-management behaviours that practitioners might consider
Malcolm, D & Scott, A. (2011) Professional relations in sport healthcare: Workplace responses to organisational change.	Olympic Medical Institute	Perceptions of sport specific specialization training & qualifications; professional boundary blurring	PM: Operational, Individual CM: Meso, Macro	Org changes have led to intra-professional tensions within healthcare disciplines (medicine & physiotherapy); org changes promoting interdisciplinary healthcare teams have fostered environments conducive to high levels of inter-professional cooperation though elements of inter-professional conflict remain; intra- & inter-professional conflict & corporation are highly interdependent processes
Malcolm, D., Scott-Bell, A. & Waddington, I. (2017) The provision of medical care in English professional football: An update.	Elite soccer	Relationships between medics & physios recruited to soccer teams	PM: Strategic, Operational, Individual CM: Macro	Medical provision has become more extensive & professional over last 10-20 years in UK soccer, with better qualified, more career-orientated & formally contracted staff; recruitment processes still need to improve, in relation to vacancy advertising, candidate interview processes
Malone, J., Harper, L.D., Jones, B., Perry, N., Barnes, C. & Towlson, C. (2019) Perspectives of applied collaborative sport science research within professional team sports.	Elite sports organizations (Australian Rules Football, rugby league, soccer, rugby union, other sports)	Relationships between academics & practitioners	PM: Strategic, Operational	General agreement in motivation to form research collaborations; barriers include staff buy-in, funding sources; practitioners prefer "fast" research with informal dissemination; academics prefer slow, more scientific outputs, such as journals or conferences; recommendation to develop research active practitioners to better inform interventions; improved collaborations should outline roles & responsibilities, increase environmentally valid research in sport & promote academic collaboration to achieve highest standards of scientific rigor to challenge the status quo

REFERENCE	CONTEXT	MSMSD COMPONENTS	MSMSD LEVELS	KEY FINDINGS
Martindale, R. & Nash, C. (2013) Sport science relevance and application: Perceptions of UK coaches. Journal of Sports Sciences, 31(8), 807-819	Elite sports organizations (soccer, rugby league, curling, judo)	Sports scientist & coach collaboration, information sharing, education & relationships	PM: Operational, Individual,	Significant variability to considered relevance of sports science to coaching, not related to coaching level; inconsistency of understanding & challenge of operationalizing information was a barrier to sports sci engagement; availability of opportunities & resources were ad hoc, which associated w/ overuse of jargon, inability for research & inability for practitioners to consider sport specific needs were also barriers to engagement
Reid, C., Stewart, E. & Thorne, G. (2004) Multidisciplinary Sport Science Teams in Elite Sport: Comprehensive Servicing or Conflict and Confusion? The Sport Psychologist, 18, 204-217	Elite Olympic sports organizations (e.g. hockey)	Proactively implementing strategies to promote collaboration, communication & healthy conflict resolution	PM: Strategic, Operational CM: Macro	MSMSDs provide potential for comprehensive athlete servicing but also introduce potential for working at cross-purposes; features incl. developing a shared vision & working model for interdisciplinary collaboration, developing trust & accepting takes time; creating an environment where change is expected & viewed as a necessary positive, role clarification, group training (including induction/ongoing dialogue about group functioning), creating team development opportunities away from work environment, empowering individuals to act with autonomy aligned to shared team commitment are all deemed to promote interdisciplinary functioning
Tee, J.C., Bekker, S., Collins, R., Klingbiel, J., van Rooyen, I., van Wyk, D., Till, K. & Jones, B. (2018) The efficacy of an iterative "sequence of prevention" approach to injury prevention by a multidisciplinary team in professional rugby union.	Elite rugby union	Intra-team collaboration to audit injury presentations, reflect & evaluate contributing factors, research & strategize appropriate interventions & re-audit	PM: Operational	Research shows that single discipline, reductionist approaches to reducing injury outcomes are unhelpful & that rich communications & collaboration btw coaching & sports science/medical teams are essential for injury reduction; complex & interactive nature of risk factors on injury rates & how an open system feedback loop can be used to propose management strategies by a multidisciplinary group
Theberge, N. (2008) The integration of chiropractors into healthcare teams: a case study from sport medicine.	Elite Olympic sports	Interdisciplinary relationships within sport healthcare teams	PM: Operational	Emphasis on performance & client-centred model of practice support inclusion of chiropractic in MSMSDs; there are ongoing tensions btw chiropractors & physicians, physiotherapists regarding scope & content of practice; chiropractors must accept reduced scope of practice in MSMSDs based around manual therapy task to fit in

REFERENCE	CONTEXT	MSMSD COMPONENTS	MSMSD LEVELS	KEY FINDINGS
Theberge, N. (2009) 'We have all the bases covered'. Constructions of Professional Boundaries in Sport Medicine.	Elite Olympic sports	Interdisciplinary relationships, occupational boundaries & jurisdiction between physios, chiropractors & athletic therapists	PM: Operational	Absence of clear boundaries demarcating work of professions, along with differences within the professional in individual skills, leads to blurred occupational boundaries which leads to challenges in establishing jurisdiction over professional practice; physiotherapy is positioned as the profession against which both ATs & chiropractors each locate themselves; ATs claim sport specialism but this is challenged by development of sport specialization in physio & chiro; resentment of ATs towards PTs; negotiation of boundaries, or divisions & distinctions between professions; discussions around notations of limitation (others don't possess something we do), holism (we're holistic, others aren't), prevention (we prevent problems by treating cause whilst others treat symptoms); chiropractic claim to contribute to performance also claim to be included in MSMSDs
Waddington, I. (2002) Jobs for the Boys? A Study of the Employment of Club Doctors and Physiotherapists in English Professional Football.	Elite soccer	Relationships between medics & physios recruited to soccer teams	PM: Strategic, Operational, Individual	Poor employment practice in appointing club doctors & physiotherapists; methods of appointment are informal, posts are hardly ever advertised, appointments often made on basis of personal contacts, often without interview, few doctors have prior experience of or qualifications in sports medicine & half of all physiotherapists are not chartered
Wagstaff, C.R.D., Gilmore, S. & Thelwell, R.C. (2015) Sport medicine and sport science practitioners' experiences of organizational change.	Elite soccer	Emotional, behavioural & attitudinal responses of MDT staff to change within the organization	PM: Strategic, Operational, Individual, Leadership CM: Micro, Meso, Macro	Volatile environments of professional sports are characterized by change & an unprecedented high turnover of personnel; change occurs over 4 stages: anticipation & uncertainty, upheaval & realization, integration & experimentation, & normalization & learning; there are poor employment practices, that have direct & indirect implications for on-field performance following org change