

Institution: Loughborough University		
Unit of Assessment: C-24 Sport and Exercise Sciences, Leisure and Tourism		
Title of case study: Improved organisational practices for the psychological development of athletes in youth and para-football		
Period when the underpinning research was undertaken: 2005-2015		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Chris Harwood, PhD	Role(s) (e.g. job title): Professor of Sport Psychology	Period(s) employed by submitting HEI: 1998-present
Period when the claimed impact occurred: 2014-present		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>With growing attention in British sport on improving organisational practice towards the psychological development and health of young athletes, Loughborough University research has pioneered a psychosocial framework ('The 5Cs') that has advanced the integration of psychological concepts in youth football. Adopted by national, transnational and professional football organisations, implementation of the framework has (1) enhanced the psychological quality of the Football Association's national programmes in coach education, player development and para-football; (2) changed educational policy in Icelandic youth sport; (3) improved the player development systems of professional Premier League youth football academies; and 4) enabled the professional development and employment of young sport psychologists by leveraging [text removed for publication] of organisational investment.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>The importance of a young person's psychosocial development within England's elite youth football academy system became the focus of research led by Professor Chris Harwood at Loughborough University between 2005 and 2015. Harwood's experience as a scientist-practitioner in professional football indicated that clubs were constraining their psychological 'duty of care' to a player by limited structured and intentional efforts towards the development of psychological and social skills (i.e., psychosocial) that were relevant to their self-concept, well-being, and performance. His initial research [R1] directly targeted coaches' roles and responsibilities for the psychosocial development of the youth footballer and their beliefs in developing players psychologically within training sessions. To this end, he conducted an intervention study in a professional football academy focused on enhancing youth coaches' levels of confidence in integrating psychosocial skills and strategies into their natural coaching sessions [R1]. Coined the 5Cs framework (through nurturing commitment, communication, concentration, control, and confidence), the 15-week educational programme helped coaches to systematically understand, plan and integrate behavioural and session management strategies that focused on sensitising players to important psychosocial skills and behaviours. By focusing on the concepts underpinning one 'C' every three weeks, the intervention sought to raise coaches' confidence levels in 'psychological coaching' and improve players' self-awareness in order to achieve a better 'psychosocial return' on the training session. Longitudinal results over the intervention period supported increases in coaches' confidence about integrating the 5Cs, and coaches reported simultaneous improvements in their young players' demonstration of positive psychosocial behaviours within their coaching sessions (e.g., enhanced levels of persistence and communication). Additionally, within this piece of applied research, Harwood referred to the 5Cs in educational activities with players and parents at the academy in order to more holistically support this coaching initiative.</p>		

Subsequently, in an intervention research study within a further youth academy setting [R2], Harwood and colleagues (2015) sought to strengthen their evidence base for the effects of 5Cs coaching on young players. In this investigation, the same 5Cs coach education programme was applied to a single, U-13 football coach. Using a longitudinal, multiple baseline design protocol, baseline (i.e., pre-intervention) data was collected from players, the coach, and the players' parents about their perceptions of the players' current 5C behaviours (i.e., psychosocial qualities) in training situations. Following this baseline period, the coach received sequential education on the principles underpinning the 5Cs subsequent to integrating relevant coaching strategies in his sessions with players. During the five subsequent intervention phases (i.e., after coach education on each C), players completed assessments of their behavioural engagement in football training associated with each C, triangulated with observation-based assessments by the coach and the players' parents. Results indicated cumulative increases in positive psychosocial behaviour reported by players across the intervention. Such self-reported improvements were also corroborated by parent and coach perceptions with post-intervention interview data illustrating how children had benefitted in terms of increased work ethic and greater confidence in communication and presentation skills at school.

3. References to the research (indicative maximum of six references)

R1 Harwood, C.G. (2008). Developmental consulting in a professional soccer academy: The 5C's coaching efficacy program. *The Sport Psychologist*, 22 (1), 109-133. <https://doi.org/10.1123/tsp.22.1.109>

R2 Harwood, C.G., Barker, J.B., & Anderson, R. (2015). Psychosocial development in youth soccer players: Assessing the effectiveness of the 5C's intervention program. *The Sport Psychologist*, 29 (4), 319–334. <https://doi.org/10.1123/tsp.2014-0161>

Both publications were subject to rigorous peer review in one of the leading international sport psychology journals focused on applied research.

4. Details of the impact (indicative maximum 750 words)

Harwood's research triggered interest from English football's national governing body, the Football Association (FA), and with their support the 5Cs framework was awarded £46,000 of competitive Higher Education Innovation Funding (HEIF). Built upon Harwood's research [R1, R2], this funding enabled educational resources, coaching strategies, and visual materials to be extended to all youth football stakeholders through a 5Cs website (www.the5Cs.co.uk) and the publication of a coaching textbook - *Coaching Psychological Skills in Youth Football – Developing the 5Cs*. To date, the website has attracted 25,000 unique users and 2412 copies of the coaching book have been sold in domestic and international markets.

These mechanisms and resources helped to establish the 5Cs framework as a primary approach for the promotion and integration of psychology in youth football contexts. The comprehensive application of the framework and its' positive effects are evidenced by the following impacts at national, transnational, and professional levels in football:

1. Enhanced the psychological quality of the Football Association's national programmes in coach education, player development and para-football.

Educational resources stemming from research on the 5Cs [R1, R2] formed content on the FA's national youth award coach qualification pathway and its 'Psychology for Football' modules. In 2014 the FA adopted the 5Cs as the psychosocial framework for its National Player Development Strategy for England football teams. Gareth Southgate, the current England senior men's team manager [S1] acknowledges the psychological contribution of the 5Cs framework, stating:

"The 5Cs was the key framework adopted by the FA to assist in the coach's development of English players' psychological qualities. The framework informed internal work on the position-specific psychological expectations of players during match play and facilitated valuable discussions to support coaching practice. The 5Cs continues to be an important educational framework for helping all grass roots and youth coaches in our country understand psychology within youth football and how they can apply psychology to develop players".

Beyond informing these position-specific psychological characteristics in the FA's playing philosophy [S2], the 5Cs framework has enhanced coaching practice, player engagement and team culture within the FA National Para-football strategy and talent pathway [S3] (including England's Cerebral Palsy, Blind, Partial Sighted, and Power-Chair teams). Since 2015, the entire coaching staff (n=30) and players (n=300) in these disability football squads have benefitted from young sport psychologists employed to embed the 5Cs into their training camps, practice sessions and matches. With over £[text removed for publication] of investment in this support programme, the Head of Performance for the FA's Para-Football programme expressed the influence of this work [S3]:

"I want to commend the originators of the 5Cs framework for its sheer utility value and ability to help our teams understand the role of psychological and social skills that affect their development and performance. It has been a consistent and staple set of elements that have greatly enhanced our talent pathway and national para-football teams' cultures; qualities that we consistently refer to in our daily work".

2. Changed educational policy in Icelandic youth sport

From 2018, the reach of the 5Cs framework extended internationally to influence the educational policy of a consortium of national Icelandic organisations - the Icelandic Football Association (KSI), the Icelandic National Olympic and Sports Association (NOC), Reykjavik University (RU), the Icelandic National Youth Association (UMFI), and the Icelandic Gymnastics Federation (FSI) – with respect to the psychosocial development of Icelandic youth athletes [S4].

Organisational thinking and developments around their collective policy were stimulated following NOC-invited presentations and workshops by Prof. Harwood to Icelandic coaches, community sport leaders, students, and parents. KSI and RU subsequently invested in a 5C's focused Doctoral studentship to support Icelandic youth football, mirroring the English Football Association's work on looking at position specific characteristics to assist player development. In 2019, the Icelandic Research council awarded a further 2 million Krona (£12,000) grant to support this work [S4].

To consolidate the value of the 5Cs framework to Icelandic youth sport education policy, a Memorandum of Understanding (MoU) was formed between the five transnational organisations and Loughborough University [S5] to collaborate on implementing the framework within the Icelandic youth sport community. An initial enactment of this policy was the consortium's submission [with Loughborough University] to the Erasmus+ European Union strategic partnership funding programme. In 2020, the strategic partnership was awarded €187,297 of European funding to drive the policy forward. The project entitled *"Delivering 5Cs coaching education for positive youth development"* supports a 30-month education and training programme for youth football and gymnastics communities in Iceland [S4].

Joint testimony from the five organisations [S4] conveys the impact of the 5Cs framework on policy in Icelandic sport and youth organisations:

"As national organisations responsible for nurturing the development of young people in Iceland, the 5Cs framework now underpins our collective, educational policy in youth sport. We believe the framework has considerable practical value for the psychosocial and character development of our young people, supported by coaches trained in the model. Our successful partnership grant represents external validation of the utility and significance of Professor Harwoods's original research and the influence that it has already had on multiple stakeholders here".

3. Improved systems of player development in professional youth football academies

Beyond the national and amateur game, application of the 5Cs framework has extended into English professional youth academies in ways that have transformed the quality of organisational practices and systems of player development. Representative examples of such impact are two prominent Premier League academies - Leicester City Football Club (LCFC) and Aston Villa Football Club (AVFC). Since 2014 and 2018 respectively, these academies together have invested £[text removed for publication] employing sport psychology practitioners to embed the 5Cs framework through their age-group programmes [S6; S7]. The process of implementing the 5Cs has:

(a) Facilitated the Category 1 status of each academy

With Category 1 status awarded by the Premier League to only the highest quality of youth football academy, both clubs cite the 5Cs framework as instrumental to ensuring the highest standard of psychology provision to meet Category 1 criteria. AVFC academy's partnership with Loughborough University was contingent on the club's belief in the strengths of what the 5Cs framework could offer [S7], whereas the LCFC Academy Manager confirms how use of the framework over a seven-year period has helped the club to attain and maintain this prestigious status [S6]:

“Most critically (it) has played a fundamental role in helping us to both achieve and maintain our status as a Category 1 Premier League Academy. Specifically, the 5C framework has enabled us to evidence a psychology programme that meets the Premier League requirements of 1) age-appropriate support for players, parents and coaches 2) objective measures and markers to tailor development programmes 3) timely and appropriate interventions and 4) regular review of the evidenced based programmes”.

(b) Improved coordination and staff responsibility for psychology across academy contexts and departments

The versatility of the 5Cs framework has enabled each academy to create a common and accepted cross-department language with the co-ordinated application of psychology across multiple disciplines in the assessment, coaching and support of individual players. The LCFC Academy Manager explains this influence on his staff and systems [S6]:

“The influence has been notable in challenging perceptions of psychology and promoting a growth mindset with regard to 5C competencies in which staff appreciate that these are skills that can be developed along with technical, tactical, and physical equivalents. In doing so the 5C framework has influenced our recruitment, development, return to play and performance evaluation processes and the ways in which we support and prepare young people for key transitions along the development pathway.”

The AVFC Academy Director notes how the 5Cs framework has created a heightened awareness amongst multidisciplinary staff of their psychological roles, shaping their individual responsibilities to players as part of a broad psychosocial culture [S7]:

“Specifically, we promote a culture in which psycho-social skill development is given intentional focus within all of our training opportunities with players and across football, gym and education domains and we recognise that different staff will be best positioned to deliver key messages and develop these skills.”

(c) Enabled structured coach development and parent education programmes

Optimising player development and care from a psychosocial perspective has been facilitated by more formal and internally structured coach and parent development initiatives within both academies [S6;S7]. Within AVFC academy, the pedagogical coaching methods from [R1; R2] that are represented in the acronym PROGRESS in Harwood's textbook are observed and reviewed as part of staff training and development [S7]:

“Our Head of Coaching has incorporated the 5Cs PROGRESS model within our coach development programme. Through recording sessions, use of PROGRESS forms part of a structured formal coach feedback process offering our coaches a valuable opportunity to reflect on their session, discuss coaching strategies to develop each of the C's and increase their competence to impact this important component of player development.”

The 5Cs framework has brought academy staff and the parents of players closer together by the provision of 5C parent education curricula, enabling academies to value parents formally and engage them on how they can best support their child. The LCFC Academy Manager expresses the features of their initiative [S6]:

“Our 5Cs parent programme has highlighted the important role that they have in modelling and shaping the psycho-social skills that the young player will need in order to meet the known demands of academy football. It has focused on providing parents with educational materials and resources to inform important performance conversations with their child

and to also give focus to reinforcing positive psychosocial behaviour when they see it happening on the pitch. The psychology staff's production of 5C Bingo cards for parents observing their child was a particularly innovative way of engaging parents and their child in this goal."

[Both Academy Directors enclose examples of the 5Cs work at their academies in **S6** and **S7**]

4) Enabled the professional development and employment of young sport psychology practitioners

With contextual relevance to the buoyancy of applied sport psychology as a career, a salient economic impact of integrating the 5Cs framework within the above academy and FA para-football programmes, has been the paid employment opportunities for trainee sport psychologists [**S3;S6;S7;S8**]. Collectively, £[text removed for publication] of investment to deliver framework-based services has supported the finances of young practitioners through their training qualifications. In addition, by working across stakeholders, such experiences in these elite and diverse settings have helped practitioners to develop the competencies necessary for their professional qualification [**S8**]. Speaking of his improved confidence and cross-cultural experiences of applying the 5Cs at LCFC academy, one of these young practitioners affirms how the framework has benefitted him personally and professionally [**S8**]:

"With the 5Cs work helping my finances as an early career professional, I have managed to build up my business further using the skills that I have gained from employing the model. I have attracted consultancy work supporting an elite gymnastics academy who have adopted the 5Cs approach over the past 2 years, and further paid services in cricket, athletics and badminton.....I am very grateful for the opportunities presented to me and can only reiterate the impact that the model has had in helping young practitioners get a paid foot on the ladder in this competitive profession and give them the confidence that they can make a difference in youth sport settings".

5. Sources to corroborate the impact (indicative maximum of ten references)

Key	Source	Reference to:
S1	Letter – Gareth Southgate, England Senior Men's Football Manager, Football Association (FA)	Impact #1
S2	The FA's DNA Player Development Strategy - Playing philosophy positional matrix linked to the 5Cs	Impact #1
S3	Letter – David Faulkner, Head of Performance for Para-Football, Football Association (FA)	Impacts #1 and #4
S4	Joint Letter – Icelandic national sport and youth organisations (KSI, RU, NOC, UMFÍ and FSI); members of the strategic partnership.	Impact #2
S5	Memorandum of Understanding (LU and Icelandic national organisations - KSI, RU, NOC [ISI], UMFÍ and FSI)	Impact #2
S6	Letter – Ian Cawley, Academy Manager, Leicester City FC	Impacts #3 and #4
S7	Letter – Mark Harrison, Academy Director, Aston Villa FC	Impacts #3 and #4
S8	Letter – Ben Walker, Sport Psychologist, Leicester City FC and private practice	Impact #3 and #4