

## Impact case study (REF3)

<b>Institution:</b> University of Birmingham		
<b>Unit of Assessment:</b> 24 – Sport and Exercise Sciences, Leisure and Tourism		
<b>Title of case study:</b> Globally transforming practice and training standards in sport and education		
<b>Period when the underpinning research was undertaken:</b> June 2009–July 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Prof. Joan L. Duda	Professor of Sport and Exercise Psychology	January 1999–present
Dr Paul Appleton	Research and Teaching Fellow	September 2009–present
<b>Period when the claimed impact occurred:</b> 2014–December 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> No		
<b>1. Summary of the impact</b>		
<p><i>Empowering Coaching</i><sup>TM</sup> practices have been adopted by individuals and sports organisations in 13 countries across the world and positively influenced the knowledge and practice of over 2,500 practitioners globally. <i>Empowering Coaching</i><sup>TM</sup> focuses on mastery and personal improvement, providing ‘voice and choice’ to participants, with care and respect. The promotion of more empowering environments has <b>enhanced the participation, health and well-being</b> of 25,000+ young people in sport and educational settings. In addition, working in youth sport, we have <b>influenced best practice through collaborations with public bodies, associations and NGOs</b> regarding empowering and disempowering behaviours and their effects, and how best to assess coaching and teaching environments.</p>		
<b>2. Underpinning research</b>		
<p>The <i>Empowering Coaching</i><sup>TM</sup> training programme was developed from our <b>new model of coach behaviour</b> that describes the characteristics of empowering (and disempowering) motivational environments along with the expected outcomes from each type of environment [R1, R2]. It aims to inform coaches on what behaviours are empowering and disempowering, and why. The training facilitates coaches and teachers to reflect on their own behaviours and then develop the awareness, confidence, and commitment to become more empowering when engaging with athletes and students.</p> <p>We developed and validated questionnaires to measure athletes’, students’, and coaches’ perceptions of how empowering or disempowering their environment is [R3], along with an observational tool which assesses the behaviours of coaches [R4]. This multi-method approach was then used to determine the overall effectiveness of the <i>Empowering Coaching</i><sup>TM</sup> training programme. The results indicated that empowering coaches focus on mastery and personal improvement, provide ‘voice and choice’ to participants, and are caring and respectful. In contrast, when coaches are controlling, intimidating and emphasise being better than others rather than doing one’s best, they are disempowering.</p> <p>Overall, we have shown that <b>empowering environments are predictive of greater autonomous motivation [R2, R5] and link to more positive engagement in sport</b> with greater levels of physical activity and reported well-being [R2, R6]. When coaches or teachers are disempowering, these positive outcomes are unlikely to emerge and athletes and students become more likely to report diminished well-being and intentions to drop out [R2].</p> <p>Importantly, these findings are consistent whether the motivational climate is assessed via questionnaire administered to athletes or students, coaches or teachers or when the</p>		

motivational climate is assessed via observation [R5].

### **Key Findings (KFs)**

**KF1:** The use of questionnaires and observational systems provides an effective means to assess both empowering and disempowering features of coach behaviours [R3, R4].

**KF2:** Empowering behaviour leads to increased autonomous reasons for participation whereas disempowering coaching behaviour results in athletes/students reporting they are not motivated at all [R1, R2, R5].

**KF3:** An empowering coaching environment is directly linked to more positive engagement and well-being [R1, R2, R6].

**KF4:** The training programme *Empowering Coaching*<sup>TM</sup> promotes coaches' empowering behaviours and diminishes disempowering motivational climates [R1, R2, R3, R4].

### **3. References to the research**

#### **Underpinning Research Outputs:**

**R1:** Duda, J. L. (2013). The conceptual and empirical foundations of Empowering Coaching<sup>TM</sup>: Setting the stage for the PAPA project. *International Journal of Sport and Exercise Psychology*, 11(4), 311–318. doi: 10.1080/1612197X.2013.839414

**R2:** Duda, J. L., & Appleton, P. R. (2016). Empowering and disempowering coaching behaviour: Conceptualization, measurement considerations, and intervention implications. In M. Raab, P. Wylleman, R. Seiler, A-M. Elbe & A. Harzigeorgiadis (eds), *Sport and Exercise Psychology Research: From Theory to Practice*. Elsevier.

**R3:** Appleton, P., Ntoumanis, N., Quested, E., Viladrich, C., & Duda, J. L. (2016). Initial validation of the coach-created Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C). *Psychology of Sport & Exercise*, 22, 53–65. doi: 10.1016/j.psychsport.2015.05.008

**R4:** Smith, N., Tessier, D., Tzioumakis, Y., Quested, E., Appleton, P., Sarrazin, P., Papaioannou, A., & Duda, J. L. (2014). Development and validation of the Multidimensional Motivational Observation System. *Journal of Sport & Exercise Psychology*, 37(1), 4–22. doi: 10.1123/jsep.2014-0059

**R5:** Smith, N., Tessier, D., Tzioumakis, Y., & Duda, J. L. (2016). The relationship between observed and perceived assessments of the coach-created motivational environment and links to athlete motivation. *Psychology of Sport and Exercise*, 23, 51–63. doi: 10.1016/j.psychsport.2015.11.001

**R6:** Fenton, S. A. M., Duda J. L., Appleton P. R., & Barrett T. G. (2017). Empowering youth sport environments: Implications for daily moderate-to-vigorous physical activity and adiposity. *Journal of Sport and Health Sciences*, 6(40), 423–433. doi: 10.1016/j.jsjs.2016.03.006

#### **Key Research Grants**

Duda, J. L. (PI), & Appleton, P. (Co-investigator). Lead on Monitoring and Evaluation of the 'Levelling the Playing Field' project, National Partner for the Alliance of Sport. London Marathon Charitable Trust. January 2020–January 2023, £120,571.

Duda, J. L. (PI) 'Empowering Coaching in Archery.' Funded by Archery GB, November 2018–May 2021, £21,350.

Duda, J. L., Cable, T., & Appleton, P. 'Implications of the motivational climate on athlete motivation, engagement and indicators of psychological and physical functioning.' Aspire Research Fund, June 2017–December 2019, £115,600.

Duda, J. L., & Appleton, P. "Identifying and Motivating youth who mostly need Physical ACTivity (IMPACT)' Erasmus+, European Commission, January 2017–December 2019, €29,187.

Appleton, P. (PI), & Duda, J. L. (Co-investigator). 'The psychological and emotional benefits of playing football on girls and women in Europe.', Union of European Football Associations (UEFA) November 2016–April 2017, £15,893.

Duda, J. L. (PI) To enhance dissemination and impact building from our previously funded 'Empowering Coaching in Doorstep Sport' project. StreetGames, April 2017–March 2018, £20,000.

Duda, J. L. (PI), & Appleton, P. Evaluation of the WRU School Rugby Programme. Funded by the Welsh Rugby Union, February 2015–September 2015, £15,000.

Duda, J. L. (PI), & Appleton, P. (Co-investigator). *Empowering Coaching™* for Doorstep Sport. Funded by Coca Cola Foundation, June 2014–March 2016, £137,700.

Appleton, P. (PI), 'Intentions to drop-out in female footballers from 5 European countries: The role of the coach-created motivational climate.', Seventh Framework Programme (FP7), European Commission, May 2014, £15,893.

Duda, J. L., (PI), Quedsted, E., & Appleton, P. Empowering teachers in Wales. Funded by Sport Wales, July 2013–July 2015, £95,000.

#### 4. Details of the impact

Professional training standards of sports coaches have been positively transformed

*Empowering Coaching™* practices [KF1, KF4] have been adopted by individuals and organisations across the world, with our training having been delivered in 13 different countries (UK, Brazil, France, Greece, Ireland, Mexico, Norway, Poland, Qatar, Spain, Sweden, Switzerland, Taiwan). The "strong research and theoretical base together with the point that it has been rigorously evaluated" [S1] has led to a range of governing bodies and charities [e.g. S1, S2, S3] incorporating *Empowering Coaching™* into their training programmes and qualifications.

**The practice and knowledge of practitioners have been positively influenced** with a total of 64 tutors across the world having been fully trained to deliver *Empowering Coaching™*. As of December 2020, it was estimated that these tutors have reached over 2,500 sports coaches and teachers worldwide. Where applicable, a commercial licensing model is used which enables tutors to train more tutors (training-the-trainers) which rapidly embeds and extends *Empowering Coaching™*. **Commercial licences have been awarded** to institutions of higher education, sport federations and dance associations in the UK, Brazil, Mexico, Spain and Sweden [e.g. S4]. For example, in 2020, 100 Archery GB coaches/club managers participated in *Empowering Coaching™* workshops with a licence agreement now providing more than 2,100 licensed Archery GB coaches and 11,000+ instructors access to the bespoke *Empowering Archery™* [S1]. The licencing model has also worked particularly well in assisting translation into foreign language settings where, for example, tutors in Mexico and Brazil have been trained by tutors from Spain originally trained by ourselves. This training-the-trainers model has allowed us to spread the ethos and practice of *Empowering Coaching™* globally.

In a further detailed example, we have **changed practice in grassroots football** as a direct impact of *Empowering Coaching™* training. To date, training has been delivered to 521 coaches and their players in England, France, Greece, Norway and Spain [S5]. Post-workshop evaluations of coaches highlighted (on a 5-pt scale) a better understanding of how to become more empowering (M=4.4) along with a commitment to be more empowering (M=4.5) [S7]. The training has led to reported improvements in the motivational climate [KF2] along with reduced intentions to drop out [S5], as testified to by the Union of European Football Associations (UEFA):

[The] underlying research and evidence for the impact of *Empowering Coaching™* have informed the vision and coach training strategies of UEFA [and identification of] the environment set by the coach as the most important factor in growing participation and encouraging high performance [...The vision is to develop] high-quality education

opportunities [...] for grassroots coaches, teachers and parents, with a focus on providing the skills and knowledge to create an empowering environment for all players. [S3]

#### Improving the environment of youth sport to enhance health and wellbeing

We have **collaborated with public bodies, associations, and NGOs**, in numerous countries, to improve the **best practice of coaches and teachers** to provide an empowering environment for young people [KF2, KF3]. The result is that the principles underpinning *Empowering Coaching*<sup>TM</sup> are now widely adopted across Youth Sport. International examples include:

1. Duda was invited by the Swiss Federal Institute of Sport to provide expertise with regard **to the benefits of an empowering motivational climate** in youth sport. This has resulted in assessments grounded in the *Empowering Coaching*<sup>TM</sup> model being embedded in the evaluation process of Switzerland's National Youth+Sport Programme [S8].
2. Inclusion of *Empowering Coaching*<sup>TM</sup> in the final report of the Safeguarding Youth Sport project as an evidence-based exemplar of 'good practice' contributing to the **creation of "positive ethical climates** in sport organisations" and "the individual empowerment of elite young athletes". The Safeguarding Youth Sport project was led by the International Centre Ethics in Sport and included 10 partners across 8 EU Member States [S9].
3. Contributions from Duda as the co-author the 'Copenhagen Consensus Statement 2016: Children, Youth and Physical Activity in Schools and during Leisure-Time'. The Consensus Statement, directly echoing Duda's work, made the following recommendation to the Danish Sport and Education Association:

An autonomy supportive, mastery focused and caring/socially supportive environment [i.e., an empowering environment] positively influences children's self-determined motivation, physical activity behaviour and holistic wellbeing [...] systematic and deliberate training enables teachers and coaches to create a positive motivational environment for children and youth. [S10]

The downstream impacts on the health and wellbeing of young people are well exemplified by the contributions of *Empowering Coaching*<sup>TM</sup> to Doorstep Sport Clubs in the UK. These are fun, informal sports clubs that operate in a style accessible to disadvantaged youth in deprived areas. Through our collaborative work with the StreetGames charity [S2] and other related projects [S5], the **health and well-being of 25,000+ young people** have been enhanced via their delivery of the *Empowering Coaching*<sup>TM</sup> for Doorstep sport programme to this group:

[the programme] has had a positive impact amongst the participants attending their sessions across a range of aspects, including: enjoyment, inclusion, motivation, competence and confidence [... we have seen] how the coaches/ leaders have been able to put learning from the [*Empowering Coaching*<sup>TM</sup>] workshop into practice within their doorstep sport sessions and how it has enhanced their skills. [S2]

#### **5. Sources to corroborate the impact**

**S1:** Testimonial from Hannah Bussey, Coach Workforce Manager, Archery GB. [Dated 10 December 2020]

**S2:** *Empowering Coaching*<sup>TM</sup> for Doorstep Sport Programme, co-developed by StreetGames and University of Birmingham – Case Study and [Video](#) [video available on request]

**S3:** Testimonial from Liam McGroarty, Business Development Manager, National Associations Division, UEFA. [Dated 14 December 2020]

**S4:** License Agreement with the University Sao Judas Tadeu, Brazil.

**S5:** Final Report - 'PAPA (Promoting Adolescent health through an intervention aimed at improving the quality of their participation in Physical Activity)'. [Final Report Summary](#) and [Project Activity Images](#)

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- S6:** Castillo, I., Ramis, Y., Cruz, J., & Balaguer, I. (2015). [Formacion de entrenadores de futbol base en el Proyecto PAPA](#). *Revista de Psicologia del Deporte*, 24, 131–138. (In Spanish)
- S7:** Report on the post-workshop quantitative and qualitative feedback across *Empowering Coaching™* deliveries (2014–2020).
- S8:** Swiss Federal Institute of Sport evaluation approach to the national Youth+Sport program ([Die Wirkevaluation von Jugend+Sport](#)) (*Website in English, report in German*) [Accessed 4 February 2021]
- S9:** International Centre Ethics in Sport. [Safeguarding Youth Sport – Booklet: Stimulating the individual empowerment of elite young athletes and a positive ethical climate in sport organisations](#) (2015)
- S10:** [The Copenhagen Consensus Conference 2016: Children, Youth, and Physical Activity in Schools and during Leisure Time](#). Published by the Copenhagen Centre for Team Sport and Health.