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Developing social and emotional competencies in incarcerated young people in seven countries in Europe, through the use of active games and sport

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Social and emotional competencies, such as self-regulation, coping with challenges and positive relationships are related to positive life outcomes. Children and young people who come into conflict with the law have not always had the opportunities to develop these competencies due to a range of disadvantages they are likely to have encountered. This research seeks to explore the extent to which identified competencies can be developed through specially designed active games for children and young people in (custodial) youth justice settings. Qualitative and quantitative data were collected to assess the effectiveness of the games in seven European countries including, Italy, Spain, Portugal, Hungary, Romania, Turkey, and the UK, making it an especially unique project developing bespoke materials suitable in secure settings and then testing them across different country contexts. A total of 326 young people participated across 17 settings with a total of 105 educators trained in the methodology. The findings suggest that participation in the active games had demonstrable impact on those who participated, both overall, and for the specific identified competencies. Participation in such programmes can support the holistic development of social and emotional competencies which can facilitate readiness and openness to learning to other interventions. It is this which is a key finding and contributes to dis/engagement theory. Such programmes should form the basis of a suite of interventions designed to support the educational (re)engagement and development of children and young people in conflict with the law. These findings have currency for developing policy which promote positive outcomes for children and young people on release back into the community across a range of national contexts.

Keywords: education; youth justice; sport; prison education

Introduction

There is a growing body of literature that advocates the use of active games and sport within youth justice settings (or with marginalised young people) as a way to develop key social and emotional skills (Morgan & Parker, 2017), in addition to increasing physical activity with a range of physical and psychological benefits (Bailey, et al., 2013). This paper reports on the findings from an Erasmus+ KA3 project entitled Active Games for Change (AG4C) which created a range of innovative active games that were specifically designed to support the development of identified social and emotional competencies (SECs) in children and young people (CYP) in conflict with the law (in custody and under community supervision). The materials and tools were piloted in (largely custodial) youth justice settings in seven European countries including England, Romania, Hungary, Turkey, Spain, Portugal and Italy.

A recent UNICEF report (2021) estimated that approximately 261,200 children are in detention worldwide. The literature indicates that children and young people (CYP) who come into conflict with the law should be provided with greater support in developing social and emotional

competencies (SECs) (Winstanley et al., 2019), such as self-regulation, coping with challenges and positive relationships; all of which are related to positive life outcomes (Klapp et al., 2017). There is a need to move from a deficit-based approach in working with CYP who offend into models/ interventions focusing upon strengths and a recognition of the '*child* first' approach (Case and Haines, 2015) with sport and activity providing a potential conduit to achieve this goal. This is especially because many of these CYP have experienced challenging socioeconomic backgrounds which have not facilitated the development of such competencies through, for example, stable school or family life (McLaughlin et al., 2017). Additionally, many of the CYP who come into conflict with the law have also dropped out of school or education: settings which contribute to the development of these competencies (Sutherland, 2011). It is therefore important that CYP are not 'responsibilised' (Case and Bateman, 2020) for not having these competencies but provided with deliberate and proactive support to develop them.

Literature Review

The literature is in general agreement that social and emotional competence has clear links to positive outcomes in adult life and higher levels of wellbeing within the general population (Schonert-Reichl, 2019). The Collaborative to Advance Social and Emotional Learning (CASEL) framework was developed by an international organisation and founded to establish social and emotional learning as an essential part of education. A meta-analysis completed by Durlak et al. (2011) points to the positive impact of social and emotional learning (SEL) programmes in promoting the specific social and emotional competencies (SEC) identified by CASEL. This was reinforced by a recognition by Mahoney et al. (2021) of the importance of the provision of opportunities to learn and practice skills linked to social and emotional learning to enhance outcomes for CYP. These competencies tend to include the ability to regulate emotions, manage social relationships and responsible decision-making, which can all serve as protective factors to dealing with change as well as being predictors of academic success (Klapp et al., 2017). Table 1 defines each competency in the CASEL framework and associated behaviours.

SECs also tend to relate to higher academic achievement and a successful career trajectory (Domitrovich et al., 2017). Additionally, SECs provide CYP with skills that support their holistic development including academic attainment and pro-social behaviours (Alzahrani et al., 2019). Conversely, according to a meta-analysis of the literature by Gutman and Schoon (2013), an absence or delay in this skill development is correlated with poorer academic outcomes, reduced financial stability in adulthood and an increase in the likelihood of engaging in criminal behaviours.

Domitrovich et al., (2017) explain the important role that social and emotional learning has in supporting the development of SEC. Vaida (2016) suggests that it is possible to develop emotional competencies throughout the age span as long as an individual is 'capable' of emotion. The important link between developing social and emotional competence through social and emotional learning from an early age is emphasised in the review of literature by Alzharni et al. (2019). This supports Klapp et al's (2017) argument that a focus on skill development is necessary as, when emotional competency is focused upon and developed throughout childhood, there is a reduction in the likelihood of CYP engaging in risk taking activities such as violence and drug misuse or criminal involvement. The following section explores the literature on the background features of young people who offend and which appear common across the partner countries.

Social, emotional competencies in children and young people in conflict with the law

Compared to the general population, for young people in conflict with the law, the issues of family breakdown, poverty, social class and other circumstantial situations are compounded by a higher prevalence of drug and alcohol misuse, higher rates of mental health problems and higher levels of learning difficulties (Chitsabesan & Hughes, 2016) alongside a greater propensity to experience of childhood trauma through Adverse Childhood Experiences (Lambie & Randall, 2013). These factors are exacerbated by behavioural problems (Young et al., 2015) and language and communication difficulties (Snow et al., 2016) which are also more prevalent. There are higher rates of co-occurring difficulties in CYP in conflict with the law and, in the prevalence of these problems, there is a greater experience of disrupted attachments and other traumatic life events (Gudjonsson et al., 2014). Given such circumstances and situations, CYP involved in youth justice systems have had less opportunity to develop these important SECs, thus potentially explaining the risk-taking behaviours alongside difficulties with, for example; self-awareness, and; regulation.

Developing social and emotional competencies through sport and active games

Fatmanur (2010) and Bailey et al. (2013) emphasise the positive impact of engaging in sporting activities on psychological, cultural, and behavioural development of individuals in addition to the physical benefits typically associated with increased physical activity (World Health Organisation, 2020). Other research has demonstrated the following themes in considering the potential of sport and physical activity to educate young people: respect for self and others alongside personal responsibility, self-regulation, communication skills, motivation and self-awareness (Ubago-Jiménez et al, 2019). Juyal and Dandona (2012) suggest that part of the reason that this development occurs

is due to the opportunity that physical activity helps to channel stronger emotions (such as aggression) in a more socially appropriate manner, often through collaborative activities.

Juyal and Dandona (2012), however, emphasise the need for caution in treating sport and physical activity as a panacea for social and emotional development in their finding that certain personality traits, such as perfectionism and over-competitiveness, can also negatively influence a young person's self-concept. This therefore, emphasises the need for ongoing interpersonal interactions, with a supportive other, to help mitigate against the potential detrimental impact on self-concept is essential. A small-scale sports intervention in a UK based young offenders' institution by Parker et al. (2014) highlights how personal development through sport fostered improvements in self-esteem and the development of social skills. It also helped young people re-envision a more positive future, therefore promoting potential desistance from subsequent offending (Stoll, 2022). Juyal and Dandona (2012) emphasised the potential of sport in providing a forum for individuals to take risks and learn how to manage both winning and losing.

Recent research by Ahmed Shafi (2018, 2019) has highlighted how the secure custodial setting itself shapes CYP's emotional responses and interactions with staff and peers. The study found that the emotions of young people who were incarcerated were complex and known to have the biggest impact on educational and learning engagement (Ahmed Shafi, 2018). The complexity of these emotions are depicted in figure 1.

Recognition of these heightened emotions when introducing active games and sport as a means to develop SECs are thus important, and need to be central in the design of games. For example, helping manage anxiety at one's own performance compared to others as well as how to empathise with others in a similar position is a further aspect that would require support.

Teaching Personal and Social Responsibility

The use of sport as a tool for personal development is not a new concept, and was formalised by several key approaches such as Positive Youth Development (Lerner et al., 2005) and Teaching Personal and Social Responsibility (TPSR) (Hellison, 2011). TPSR is an approach that aims to develop human decency and positive relationships with others. It is underpinned by several pedagogical principles: positive relationships, gradual empowerment, awareness talks and, finally, transfer (young people are able to see where the competencies developed in the sport/games might be used in wider life) (Hellison, 2011). The success of TPSR based programmes is notable in the large number of research studies that show positive outcomes, as recently highlighted in an extensive systematic review from Baptista et al. (2020), who centred their focus on community settings. Whilst

it is acknowledged the community setting is different from a secure setting, the populations for many of these studies were identified as 'at risk', disaffected or considered vulnerable youngsters, due to drug abuse, use of violence, among other behaviours that may lead to social exclusion. Therefore, the findings are highly relevant to groups within secure settings who share similar characteristics. Specific research within secure settings can be found in recent work from Jackson (2013) who implemented a TPSR based programme with 13-17 year old youth in a US detention centre. The findings demonstrated positive effects on social skills, both within and beyond the physical activity environment and aided their rehabilitation. Similar findings are reported in more recent work in Portugal where Martins et al. (2022) implemented a TPSR based football (soccer) programme with incarcerated youth. The collective findings demonstrate the robustness of the TPSR model working across multiple countries, contexts, and populations. The AG4C programme was, therefore, designed in line with this approach.

Engaging children in sport and active games

Recently, attention has begun to focus on the importance of embedding sport and physical activity in penal settings as part of an effort to promote both young peoples' physical/mental health and well-being (Meek et al., 2012). However, assuming that young people in conflict with the law will positively engage with active games or sport within the youth justice system is too simplistic - a view discussed by Morgan et al. (2020) who argue for more theoretically based approaches to evaluation of the effectiveness of sporting interventions. Taking this view into account, this paper draws on the notion of engagement theory (Fredricks et al., 2004), especially as young people who offend are often disengaged with education and learning and, if the sport or active games opportunities are presented as such, it is unlikely to be successful.

Engagement is a complex multidimensional construct and consists of three main components, the behavioural, the cognitive and the emotional (affective) (Fredricks et al., 2004). Engagement has been shown to be a protective factor for delinquency and problem behaviours, such as truanting, substance abuse and offending behaviour (Hirschfield & Gasper, 2011; Wang & Fredricks, 2014). Many of the characteristics in young people who offend relate to disengagement with education and learning, for example, withdrawal, disruptive or distracted behaviours (Earl et al., 2017) as distinct to engagement (ahmed Shafi., 2019). Ahmed Shafi (2019) found that young people who offend oscillate between both active (e.g. disruptive, distracted) and passive (withdrawn) forms of disengagement. Therefore, it is necessary to employ a range of strategies for re-engagement that respond to both the social and emotional conditions of the young person. One method through which engagement may be improved is through the medium of sport and active games, which can

be viewed as a less threatening and more relaxed form of interaction (Shen et al., 2022). However, these games would also need to fit within the constraints of the setting in order for them to become an integral part of the offering with the role of the educator being central.

The role of the educator

Creating a positive learning environment, where young people can have fun, interact with caring adults, and feel safe (both physically and psychologically), has been highlighted as key foundation for social and emotional development of young people through sport (Shen et al., 2022). Hellison (2011) underpinned the essential nature of involvement of caring adults for the success of sports programmes aiming to develop personal and social responsibility. Further work from Barker and Forneris (2012) evaluated the use of a sports programme with at risk youth and further emphasised the importance of the pedagogue in forming healthy working relationships. They also note the challenges involved with this with the target population, who can frequently exhibit fleeting attendance, join or leave the programme abruptly, and have negative perceptions of leadership/authority. Strategies to help form these positive relationships have been highlighted by Turnnidge and Cote (2016) through their identification of trust as a key facet in building effective relationships between educators and participants in sport settings. The need for positive exchanges between leaders and participants which fostered positive group processes such as team cohesion, team learning, communication, and a sense of community, is further emphasised.

Attitudes and skills of instructors

The attitudes of society and indeed staff at the settings play an important part in the successful implementation of interventions (Meek et al., 2012). This includes the general approach to what may be perceived as recreational activities when serving sentences. Further, the status that games and sport may have in the educational systems and justice systems of the partner countries can also have an impact. These issues are all in addition to the individual young people and their own personal view of active games and sport, which can be varied (Fraser-Thomas & Cote, 2009).

Contextual challenges

The use of sport in (adult) prisons is a relatively new phenomenon in Europe with approximately 49% having only introduced it after 2000, with regional variations across Europe (Sempe, 2019). This suggests that the use of sports or active games is not fully established, though its introduction is encased with the broad notion of 'rehabilitation'. This has an impact on the status of active games and sport in settings and may be dependent on the individual culture of the settings. Sempe (2019)

found three main practices of sport in prisons: supervised, self-managed and to a much lesser extent, competitive. However, the research found that sports very rarely have a separate budget line. This suggests that partners in this project could experience some challenges in resources and facilities including the availability of staff and supervision of sports activities that would need accounting for in the programme design.

Access to secure custodial or other youth justice settings was an identified challenge in the planning of the research project as these settings are closed by nature. Access is closely monitored and subject to many bureaucratic procedures (Martos-Garcia, 2022). Further the 'doubly vulnerable' (Moore & Miller, 1999) nature of incarcerated young people presents additional access challenges (ahmed Shafi, 2019) hence the local partners in the project were critical to supporting access to secure youth justice settings in their respective countries.

Research aims

Whilst there is a recognition that further research is required in relation to the impact of sport on effective rehabilitation and the reduction of re-offending (Meek et al., 2012), participants of such programmes in prison settings have reported that benefits derived from involvement in the programmes as contributing to their avoidance of re-offending upon release (Gallant et al., 2015). The impact from such programmes can be achieved through a holistic approach to developing SECs for longer-term benefits for the young people. There is a need for more research on the SECs of incarcerated young people and especially in relation to the use of sports or active games in prison, which we know to be a popular activity. This research seeks to explore the extent to which the identified competencies can be developed through specially designed active games for CYP who are in (custodial) youth justice settings. Particularly this research aims to pilot the designed materials and resources for their effectiveness in seven different countries which makes it especially unique. Findings can therefore be useful across a range of country contexts.

Methodology

Defining the social and emotional competencies to be developed through AG4C

The CASEL set of competencies were used to underpin the games design and included self-awareness; self-management; social awareness; relationship skills and responsible decision making (Durlak et al., 2011; see Figure 2). The CASEL framework was selected due to its clear links between

research, policy and practice underpinned by a collaborative approach with a range of expertise including practitioners, academics, and policy makers (Durlak et al., 2011).

Table 1 defines each competency and associated behaviours. These were described in a video format www.activegames4change.org/ag4c-videos.html to support educators' understanding of each competence and how they could detect its presence.

Research design

The research project involved the co-designing of a set of active games in order to develop the five core competencies. All the partners contributed to ensure cultural adaptability and suitability for use in custodial and youth justice settings in their respective countries before the games were piloted in partner countries. A pre- and post-intervention survey instrument selected for its suitability to the cohort and transnational nature of the project (see later section on Assessment Tools), assessing the five SECs was administered before the games began and then, when the learner(s) either completed all the games or they had to be moved on from that setting, either for release or transfer to another setting. The survey generated data which gave more information on individual learners and groups of learners. Not all settings had access to the internet or had devices available and so all materials, resources, and tools were available in paper and offline versions.

Games design and adaptations

Eighteen games were designed at three ascending levels (6 games at each level), each to develop one or more of the identified competencies within the CASEL framework. A games card which outlined the aims and purpose of the game as well as how to play the game was designed. The same games card enabled the educator (once trained) to be able to assess the learner or group of learners on whether they were emerging, developing or established, in the said competence. All games were also available on the specially designed AG4C App (www.activegames4change.org/ag4c-app.html) where progress data could also be captured.

The next step involved training the educators (and/or master trainers) from participating youth justice settings to enable them to test the games programme with the CYP as well as to gather both pre and post (experimental) data. They also conducted ongoing evaluations of the games, the training and supporting material (see Figure 3). This generated a range of qualitative and quantitative data across nine data points, outlined in Table 2.

A full set of training packs which contained the 18 games, online theoretical and practical training with video tutorials and other resources, including the AG4C App (suitable for online and offline use), were provided to all participating settings in all partner countries. All games were designed with adaptations for use in the different cultural contexts as well as differing availability of resources and abilities (including the App). These were translated into Turkish, Romanian, Hungarian, Portuguese, Spanish and Italian.

Assessment tools

The overall assessment tool for the development of the SECs was selected using the SPECTRUM (Social, Psychological, Emotional, Concepts of Self and Resilience: Understanding and Measurement) from the Education Endowment Foundation (UK) (Wigelsworth et al., 2017). 86 tools were initially identified; each of which focused on measuring outcomes for children and adolescents. These were evaluated against the following criteria: conceptual domain fidelity; target age range; suitability for the AG4C (i.e. accessibility; translations already available; cost; time taken to administer and score). The Warwick-Edinburgh well-being scale (WEMWBS) emerged as the 'best-fit' because it was validated for multi-cultural use and available in numerous European languages. It also had an evidence base for use pre-and post- interventions in order to establish whether or not the specific SECs identified have been impacted by engaging in the AG4C programme. The questions were cross-referenced to the core social emotional competencies identified by CASEL to ensure that all competencies mapped on to at least one question. An additional two qualitative questions were designed where the competencies were not as well covered by the WEMWBS and to gather a further depth of data.

A total of nine data points assessing a range of relevant areas including assessing the usefulness of the games as well as educator and young peoples' views on the training and games. These findings are presented in later papers.

Participant settings and young people

A total of 326 young people and 105 educators in 17 settings across the seven countries tested the games, materials and resources, collecting data across the nine data points generating a considerable mass of data. Table 3 outlines the number of educators and young people that participated per partner country and the number who completed a pre and post WEMWBS.

The use of digital technology in most secure and custodial settings in the partner countries was limited or with no Wi-Fi access. There are debates on the use of digital technology in prisons for education and rehabilitative purposes (e.g., Mufarreh et al., 2022) but overall, this is still in its infancy as evidenced by the very little availability in the pilot settings. Thus, whilst an Android and Apple version of an App to support the games was designed, the offline availability was critical.

Ethical approval

Ethical approval from the lead partner's university was sought and due consideration given to the methodological and ethical challenges of conducting this work in custodial settings (ahmed Shafi, 2020) with 'doubly vulnerable' participants (Moore and Miller, 1999). These included issues of genuine informed consent as well as the role of the gatekeepers with such a cohort. Initial access and consent was obtained via gatekeepers but participation in the programme and games themselves was by choice from the young people. Those who participated in the games were made aware that data would be collected and its purpose. Participants were also made aware of their right to withdraw from the project without penalty or explanation and the anonymity of their data. Names attached to the pre and post survey data were discarded as soon as the data were matched and pseudonyms used thereafter. This process was explained to participants and gatekeepers before beginning. A number of participants did not initially participate and we take from that that they understood that they could abstain without penalty.

Other particular challenges were faced as the training of educators and then the actual testing phase of the project was disrupted by the Covid-19 pandemic. The online version of the training and the associated videos were added on as a direct result of the impact of the pandemic but ultimately contributed to the longevity and sustainability of the materials and resources.

Findings

A total of 326 CYP aged between 13-24 years and 105 educators from 17 settings across seven countries participated in the AG4C project. Table 3 indicates the number of CYP that participated in each country and the number of educators. It also states how many completed a pre- and post-questionnaire.

Quantitative data

Paired sample t-tests were used to analyse the aggregate means of the (normally distributed) pre and post data from all partner countries (and also individually for each country) to see if participating in the AG4C project improved the social and emotional competencies assessed using the WEMWBS. There was a highly statistically significant difference in the scores across the datasets from all participating countries demonstrating improvement in the aggregate post-test WEMWBS scores of the CYP. The t-statistic was 5.17, with $df=280$ ($p < .01$). This suggests that overall well-being improved after participation in the AG4C programme and is illustrated in Figure 5.

Paired t-tests were also conducted on the (normally distributed) pre and post data for each participating country and Table 4 presents the t-statistics breakdown for each country. The differences in the pre and post data were highly statistically significant* in the data from Turkey, Spain, Hungary, Romania and the UK, as well as the dataset as a whole. Portugal and Italy did not yield statistically significant results but did show improvement. Descriptive results are presented visually in Figure 6.

It was also possible to use the WEMWBS data and explore low, moderate and high well-being. The analysis tools automatically collate the WEMWBS data into a mean averages graph, which when corroborated with the t-test data, provides a much more accessible view of the findings. The graph below indicates that a higher proportion of participants reported higher well-being after the AG4C programme than before.

To explore how effective participation in the AG4C games was against each competency, data from all countries were isolated to the questions mapped to each competency and new mean averages were taken. All competencies as mapped on to the WEMWBS showed a statistically significant improvement. Figure 8 indicates these results visually.

Further exploration of the data at country level yielded greater detail on the extent of the development of each competency in each participating country. These are related to the extent of significance in overall well-being as measured by the WEMWBS scale. Table 5 presents the t-values, p value and degrees of freedom for each competency in each country. These results show that, for example, the UK, Hungary and Spain all had high statistically significant results for all five competencies with Romania and Italy obtaining high statistical significance for three of the five

competencies. However, in Portugal, only social awareness was statistically significant and some of the results even suggested a decline in those competencies during the pilot data collecting phase.

Whilst there was overall statistical significance for the competencies, Table 5 demonstrates that at individual country level, the AG4C programme had differing levels of impact in each of the competencies. This could be dependent on a number of issues such as the context, culture, availability of equipment for various games that develop each competence, educator confidence and commitment by the leadership, as well as time spent on the programme. Given the limited scope of this paper, further exploration of these factors is the focus of a forthcoming paper.

Qualitative data

Data from young people

The qualitative data from the two additional qualitative questions were first linked to the competencies and the data coded deductively using Braun and Clarke's (2019) thematic analysis framework. These themes are presented in Figure 9.

The data showed that all competencies were referenced in the qualitative data, particularly relationship skills and social awareness.

Links to competencies

The data here showed that participants in the programme were both aware of, and valued, the development of the key competencies. These were often tailored around working with others in a similar vein to findings from Martins et al. (2022) and can be seen in the quotes:

'Working together made it easier. I tried to pay attention to what others were doing.'
(Hungary) (Social Awareness)

'Working together with others allowed me to feel like I was helping others and being helped.'
(Italy) (Relationship skills)

Enjoyment

To fully benefit from the intervention, a degree of fun and enjoyment served as a foundation for success. Hellison (2011) acknowledges the use of sport and active games as a vehicle for personal

and social development because it generally engages young people (more than other contexts), as can be seen in the quote here:

‘Playing the games all together was very fun.’ (Portugal)

Overcoming Problems

Echoing similar findings from Jackson et al. (2013), conflict resolution and overcoming failure were key features of the programme that helped to develop several of the competencies targeted within the intervention. The resilience and determination shown to overcome problems and address failures were outlined by two participants below:

‘When we had already done 1-2 games, I was more confident. Not at first, I felt it wasn’t going to work, but I got the hang of it. It took practice.’ (Hungary)

‘I did not want to give up, even though sometimes I was really close to.’ (Romania)

Transfer

For the intervention to be truly successful we wanted to see or hear young people who had the intention to transfer their newly developed skills in settings outside the AG4C sessions. Transfer has been seen as a problematic area for TPSR programmes (Gordon & Doyle, 2015), therefore it was pleasing to hear from participants of their intention to embrace their new skills:

“Working together with others has helped me embrace different points of view” (Italy)

‘Working with others helps me gain more confidence. To build better relationships with others.’ (UK)

These data show that, on the whole, the young people who participated showed improved SECs, assessed using the WEMWBS, having participated in the AG4C games, both across the dataset and in individual countries.

Data from educators

Four of the data points - DP1 – Post training survey, DP2 – Observation grid (to assess each game), DP7 – Post pilot survey and DP8 – Educator Testimonials combined, provided a comprehensive picture of the educator’s journey through the delivery of the programme. Importantly, it highlighted the positive attitude CYP had towards the programme, as indicated by most educators. The data

from the post training survey across all countries revealed the comprehensive nature of the training (despite being online) and the quality of the support materials (games cards and app). These allowed educators to feel a high degree of confidence in their ability to deliver and assess the programme successfully.

‘The training allowed me to try the games out and understand the teaching approaches, this gave me a good level of confidence to feel I could deliver the programme effectively in my setting.’ (UK educator)

The data from DP7 demonstrated high intervention fidelity (i.e. the intervention was largely delivered as planned) with the only variations being in timings (some settings had longer or shorter sessions with the young people) and group sizes (varying from quite small groups of 5 or less young people to larger groups of up to 27). Minimal changes were needed to the games and most of these were in line with the adaptations suggested on the cards. A range of comments in the observations aligned with high levels of enjoyment, as well as the visible enhancement of the competencies targeted in the programme, in particular around teamwork and communication.

‘They became a little more tolerant to each other, the shared experience made them more open to each other.’ Hungarian educator [translated]

‘The group dynamics and the level of sociality have improved, yes, there has been a strengthening of social relations.’ Italian educator [translated]

The post pilot survey (DP7) and testimonials (DP8) provide some of the most in-depth evaluation of the programme. Once again, the educators highlighted the high levels of enjoyment and engagement within the programme. Participants would “look forward” to the AG4C sessions, often being considered “a highlight of the week”. This degree of motivation had the knock-on effect of young people being more open to developing some of the social emotional competencies targeted within the programme.

‘It has helped with motivation for sure. They are learning but don't really realise they are learning [due to enjoyment].’ Romanian Educator [translated]

Educators responded positively to the ease of implementing the programme due to the clarity of the materials and additional support of the app/video elements. Perhaps most importantly, many educators revealed that they had observed improvements in all SECs to some degree within the games themselves. This was also for a large number of participants outside of the programme in

their daily interactions, with improved communication and relationships being highlighted by several educators. Some educators did however observe that not all participants enhanced their SECs within the programme, or that any gains were not always seen to be transferable beyond the programme itself. This is contrary to how some of the young people perceived it and speaks to the depth and complexity of rehabilitation in these settings. Some of the key quotes from the educator testimonials (DP8) are highlighted below.

‘It strengthens the community and the experiences play a massive cohesive role in the children's group, which manifests itself in many areas of institutional life’ Hungarian educator [translated]

‘The methodology allows participants to be more motivated and curious to learn something new. It also increases the team spirit, communication and leadership skills.’ Portuguese educator [translated]

‘It is a different way of working with young people, they are dynamic and they can keep being done without any issues...we had one girl who was trying really hard, she was having fun, and was open to working with her teammates. We had never seen her like this before.’ Spanish educator [translated]

Discussion

This research project aimed to explore the potential of specifically designed active games and sport in developing the identified SECs in CYP within youth justice settings in seven countries in Europe. The findings suggest that participation in the active games had demonstrable impact on those who participated, both overall, and for the specific identified competencies. These findings are discussed in relation to the literature, including limitations and how they contribute to theory, practice and knowledge in this field.

The findings support the view of Vaida (2016) showing it is indeed possible to develop SEC throughout the age span when given adequate and direct focus (Klapp et al., 2017) and, in a relatively short space of time. Qualitative data from the educators and young people demonstrated how participation in the games led to positive interactions in a virtuous cycle. This is in line with argument from Akfirat et al. (2006) regarding the potential for transfer of SECs beyond the game's context (Hellison, 2011; Morgan et al., 2020). This element of transferability is in contrast to other literature, such as Juyal and Dandona (2012) which passed scepticism on the generalisability of the

skills developed during participation of games and sport. However, whilst one should be cautious in overclaiming the findings, the data do support the research which emphasises how the positive interpersonal interactions with a supportive other (be that a peer or a mentor/educator) (Fatmanur, 2010; Yıldız et al., 2018; Ubago-Jiménez et al., 2019) can be seen to transfer outside the (active) games situation. As pointed out by Parker et al. (2014), this is because interactions during active games/sport can act as a model for how to deal with other challenging situations, such as winning or losing and particularly the management of emotions within these scenarios.

The findings also emphasise the significance of emotions for CYP when incarcerated as highlighted by Ahmed Shafi (2019) and how the management of emotions (positive or negative) are critical in how CYP respond to learning or indeed other situations (Deakin Crick et al., 2015). The effective management of emotions and social situations have been shown to have predictive strength for behavioural cognitive engagement (Li and Lerner, 2014). For example, if a learner has developed the skills to manage winning or losing in a sport/games situation, the same management of emotions are required when faced with other (challenging/learning) situations. Thus, whilst engagement with the programme itself may not necessarily be directly transferable in the way alluded to in the literature, engagement can create the (social) conditions which can help learners be more open to the opportunities of learning; which, when they are disengaged, are closed (Deakin Crick et al., 2015). In this way, participation in such programmes can support the overall development of the SECs which can facilitate readiness and openness to learning in other interventions. It is this which is a key finding and contributes to dis/engagement theory and TPSR (Hellison, 2011).

Generally, interventions are designed to create specific desired effects but the AG4C intervention has shown not only to work within such settings and across a wider range of cultural and country contexts, but demonstrates a potential to engage CYP with other opportunities which they may not have felt able to do so (Earl et al., 2017). The other key finding has been the relative ease (in terms of time) that it has been possible to develop the competencies. The Covid-19 pandemic and the associated lockdowns in the partner countries created additional difficulties of access to secure and custodial settings and whilst piloting of the materials did not have the same luxury of time, had they been tested in 'regular' times, the findings may have yielded greater effect. This could be particularly used in connection to differing extents to which each competency was developed in the different country contexts. Whilst not all competencies develop at the same rate (Lawson et al., 2021) or in the same way, on the whole, the findings suggest improvement (even when not statistically significant), which is important. The literature (e.g. Codd & Roth, 2019) shows that

during interventions, it is not unusual for there to be a dip before improvement occurs, particularly if the intervention is short term. This could well be the case in AG4C where a competency may even show a lower score at post-test. Whilst not immediately in the desired direction, this demonstrates that participation is having some impact which may not be beneficial for that participant and warrants further exploration. For example, it could be that a longer intervention timescale is needed for different participants and settings for impact, or acknowledging that the intervention is not working for particular participants for a particular competency.

The role of the educator is another area that must not be under-estimated and could go some way to explaining the success of the research project and indeed some of the differences found between competencies in the different country contexts (Table 5). In line with previous research utilising sport with disaffected youth, the first important step is finding an educator who believes in both the value of the programme and the ability of the young people to benefit from it (Hellison, 2011). This subsequently allowed many of the facets of a positive learning environment to be created around the programme that had been previously outlined by Shen et al. (2022): fun, caring relationships and safety. The (qualitative) data highlighted both the commitment and enthusiasm of the educators, as well as their belief in not only the programme itself, but also the young people interacting with it. This aligns with previous research from Barker and Forneris (2012) who highlighted educator belief in a programme to be a key factor in the success of their intervention work. Importantly, the feedback suggests that educators built trusting relationships with the groups (Turnnidge and Cote, 2016) that supported elements such as, reflection and goal setting, which were important discursive elements of the intervention.

Whilst the findings present a positive picture of being able to develop the said SECs, as defined by CASEL and as assessed by the WEMWBS, the process of conducting this work in secure custodial and other youth justice settings during a pandemic, must not be under-estimated and warrants discussion. Prior to the pandemic access to secure custodial settings were largely secured, but the various lockdown restrictions in all partner countries at different times and extents had a significant impact. In many cases, a complete block on access to secure or other youth justice settings was imposed. Even when restrictions were eased, settings experienced considerable staffing issues which meant they were less amenable to external programmes or visitors, thereby maintaining very restricted access, largely limited to their own staff. For a number of partners, e.g. UK, Italy, Hungary and Romania access that was initially confirmed was withdrawn from a number of settings meaning that partners had to establish new relationships with settings and, in some instances, re-train (e.g.

UK) educators. For this reason, piloting did not start until November 2021 and lasted only until May 2022. Originally, the aim was for a 12 month piloting duration to enable settings to embed the materials and pedagogy into the settings. Despite this, 326 young people experienced the AG4C pilot programme and 105 educators were trained. In some ways, the lack of access (particularly for the training) resulted in an online training pack, which actually resulted in a more sustainable and accessible set of materials than would have been the case before. Thus, whilst there were difficulties, there were additional tangible outcomes adding to the longevity/applicability of the programme otherwise not originally envisaged

It should also be noted that there was no reported access to WIFI or internet facilities, except under close supervision and only for traditional educational activities based in classrooms. This presented some challenge for the design of the App for use with the active games and sport in order to engage and measure development and progress of the social, emotional, civic and e-competencies. The limited WIFI/ internet access is an area that will require some structural, attitudinal and funding changes and the focus of considerable debate for policy makers, as highlighted in the paper by for example, Mufarreh et al. (2022).

Conclusions

This research project has demonstrated that active games and sport can play a particular and deliberate role, not just in physical activity, but in developing SECs in CYP in secure or other youth justice settings. This was the case in all participating countries where the educators and the settings themselves are committed to the programme. Such programmes should form the basis of a suite of interventions designed to support the educational (re)engagement and development of CYP who are in conflict with the law. If this can work well in challenging secure custodial environments for CYP with complex needs, during a global pandemic, then it has demonstrated its usability in other community settings. These findings have currency for developing policy that aims to engage CYP with interventions whilst in custodial settings to develop the foundations for reducing reoffending and promoting positive outcomes on release back into the community.

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Appendix

Competency mapping

This table demonstrates the five core CASEL Social and Emotional competencies mapped on to the questions in the Warwick-Edinburgh Mental Health and Wellbeing Scale (WEBWMS).

CASEL Competency	WEBWMS question
Self-awareness	Q2. I've been feeling useful. Q3. I've been feeling relaxed. Q8. I've been feeling good about myself. Q10. I've been feeling confident.
Social Awareness	Q4. I've been feeling interested in other people.
Self-Management	Q1. I've been feeling optimistic about the future. Q5. I've had energy to spare. Q13. I've been interested in new things.
Relationship Skills	Q9. I've been feeling close to other people. Q12. I've been feeling loved.
Responsible Decision-making	Q6. I've been dealing with problems well. Q7. I've been thinking clearly. Q11. I've been able to make up my mind about things.

Two qualitative questions were also developed to bolster CASEL competencies with fewer mapped WEMWBS questions to ensure that development of these competencies was better captured.

CASEL Competency	Qualitative question
Relationship Skills	1. How did working with others help you to achieve the end goal of the games?
Self-Management Responsible Decision-Making	2. How did you overcome any difficulties that you felt in achieving the end goal of the games?

Tables

Table 1. Definitions of the social and emotional competencies used and their indicators.

Competency	Definition	Indicators of the competency
Self-awareness	Ability to accurately judge one's own performance and behaviour.	Evaluation of own strengths and areas for development.
Self-management	Ability to regulate own activity with little or no intervention from others.	Discipline to play within the rules to make the game fair for all.
Responsible decision making	Making reasoned decisions that consider the views of various stakeholders.	Making accurate judgements about own ability.
Relationship skills	Skills, tools, knowledge and understanding to create, communicate, evolve, grow, trust and maintain a relationship.	Ability to share own ideas, listen effectively to others and able to negotiate a solution.
Social awareness	Ability to know and feel the people around you and the ability to interact with them in the most efficient and proper manner.	Recognise strengths and limitations of the group. Show understanding of how actions may impact others.

Table 2. The data points (not all are reported on in this paper).

No.	Type of evaluation	When?	Purpose
1.	Educator Survey post training	After training of educators	Assess the effectiveness of the training itself and how well it prepared educators for delivering the games.
2.	WEMHWBS scale	Before piloting with young people	Assess social and emotional competences of young people
3.	Rating social and emotional competencies of young people	After each level implementation	Evaluation for learners' competencies includes rating social and emotional competences after each game.
4.	Observation grid	After each game implementation	Register the most important things that happen during the piloting and to discuss challenges felt during the games
5.	WEMHWBS scale	After piloting with young people	Assess social and emotional competences of young people
6.	Qualitative questions for young people	After piloting with young people	Generate qualitative data to focus on Self-Management, Relationship Skills and Responsible Decision Making. Encourage active reflection and therefore engagement in understanding and developing the targeted competencies.
7.	Educator Survey post piloting	After piloting with young people	Educator perspectives on how well the young people responded to the AG4C intervention overall.
8.	Testimonials / case studies from educators	After the piloting	Educator perspectives on strengths and weaknesses of the AG4C methodology;
9.	Testimonial / case studies from young people	After the piloting	Young people perspectives on strengths and weaknesses of the AG4C methodology.

Table 3. The number of participants in each partner country.

Country	Young people (aged 13-24)	Educators Trained
UK	60 (48 pre and post)	11
Portugal	56	20
Italy	48 (47 pre and post)	28
Spain	26 (23 pre and post)	5
Hungary	46	29
Romania	40	2
Turkey	50	10
Total	326 (291 pre and post)	105

Table 4. Statistical results for each competency from data from all partner countries combined.

Competency	t-value	p-value	df
Self-awareness	8.06	0.01	280
Self- management	8.31	0.01	280
Relationship skills	4.89	0.01	280
Social awareness	4.94	0.01	280
Responsible decision making	7.83	0.01	280

Table 5. Statistical results for each competency from each of the participating countries. An * indicates statistical significance.

	Self-awareness			Self-management			Relationship skills			Social awareness			Responsible decision making		
	t-value	P value	df	t-value	P value	df	t-value	P value	df	t-value	P value	df	t-value	P value	df
UK	3.70*	0.01	42	4.56*	0.01	42	2.40*	0.05	42	1.70*	0.05	42	3.72*	0.01	42
Portugal	-0.26	-	31	1.08	-	31	-0.12	-	31	2.53*	0.01	31	-0.31	-	31
Italy	2.57*	0.01	46	0.39	-	46	2.38*	0.01	46	0.16	-	46	2.79*	0.01	46
Turkey	2.74*	0.01	37	1.59	-	37	1.79	-	37	1.45	-	37	2.16*	-	37
Spain	4.37*	0.01	34	3.47*	0.01	34	3.35*	0.01	34	2.08*	0.05	34	5.10*	0.01	34
Romania	2.67*	0.01	39	3.06*	0.01	39	-0.43	-	39	0.94	-	39	3.40*	0.01	39
Hungary	6.34*	0.01	45	9.84*	0.01	45	3.87*	0.01	45	5.08*	0.01	45	5.55*	0.01	45

Table 6. Table outlining the results from the paired t-tests for each country and as a whole data set.

Country	t-value	p-value	df
UK*	4.17	0.01	42
Portugal	0.37	-	31
Italy	1.50	1.05	46
Turkey*	2.46	0.05	37
Spain*	4.39	0.01	34
Romania*	4.93	0.01	39
Hungary*	7.55	0.01	45
Across all partner countries*	5.17	0.01	280

Figures

Figure 1

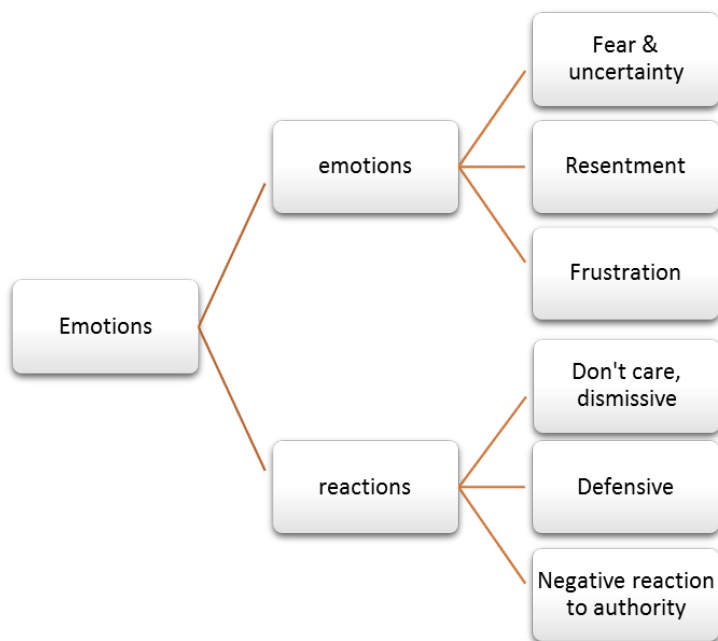


Figure 2



Figure 3

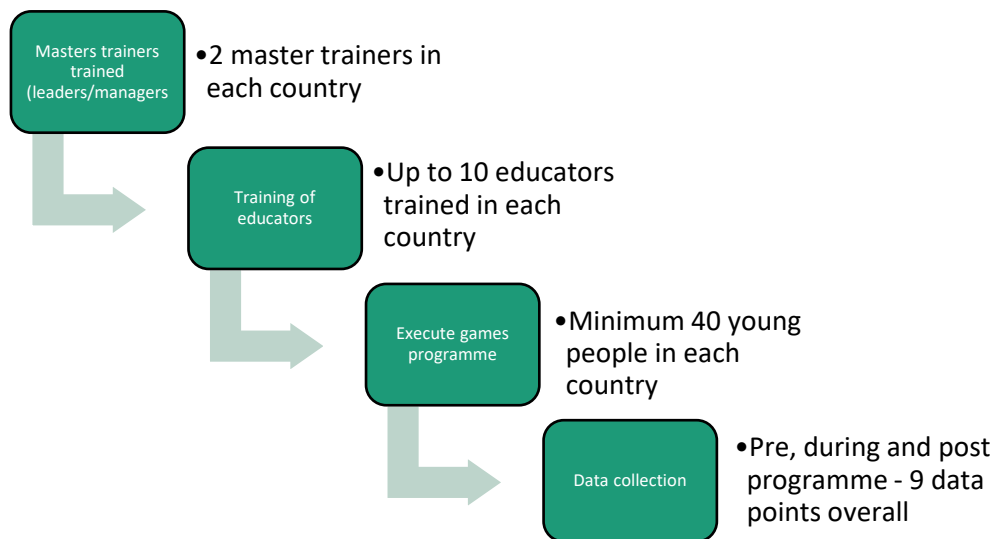


Figure 4

Retrieval Challenge Level 3

Game Overview

Set-Up

Competences

Equipment

Adaptations

Reflection

Retrieval Challenge Competencies

Competencies Defined	
Self-awareness	Self-awareness is the thinking skill that focuses on an individual's ability to accurately judge their own performance and behaviour and to respond appropriately to different social situations. Self-awareness helps an individual to tune into their feelings, as well as to the behaviours and feelings of others.
Self-management	Self-management refers to the ability of a person to regulate their own activity with little or no intervention with others. This will include staying on task even when distractions are present and making good choices in terms of actions and behaviour.
Responsible decision making	Responsible decision making involves being able to demonstrate making a reasoned decision that considers the views of various stakeholders (other people) with a clear rationale behind the decision-making process. This may involve seeking the views of others or experts.
Relationship skills	Relationship skills refers to the skills, tools, knowledge and understanding to create, communicate, evolve, grow, trust and maintain a relationship. This involves being able to work effectively with a broad range of individuals from different backgrounds.
Social awareness	Social awareness is the ability to know and feel the people around you and the ability to interact with them in the most efficient and proper manner. This includes being to empathise with various viewpoints and consider how your own actions may be interpreted by others.

Competency Ratings – Retrieval Challenge			
	Emerging	Developing	Established
Self-awareness	Rarely recognises the impact of their contribution and the impact this has on others.	At times recognises the impact of their contribution and the impact this has on others.	Clearly recognises the impact of their contribution and the impact this has on others.
Self-management	Struggles to maintain concentration on the task throughout with frequent intervention needed from others.	Maintains good concentration on the task throughout with some intervention from others.	Maintains full concentration on the task throughout with no intervention from others.
Responsible decision making	Rarely seeks others views before deciding on a strategy to solve the problem.	Sometimes seeks others views before deciding on a strategy to solve the problem.	Seeks others views before deciding on a strategy to solve the problem.
Relationship skills	Little communication with others when working alone.	Communicates effectively throughout most of the task offering frequent contributions.	Communicates effectively throughout the task and is able to lead effectively.
Social awareness	Is often unaware of their impact on others and the task. Finds it difficult to understand others views.	Shows empathy at times during the task and is able to understand most ideas from a range of viewpoints.	Shows empathy throughout the task and is able to synthesise ideas from a range of viewpoints.

Figure 5

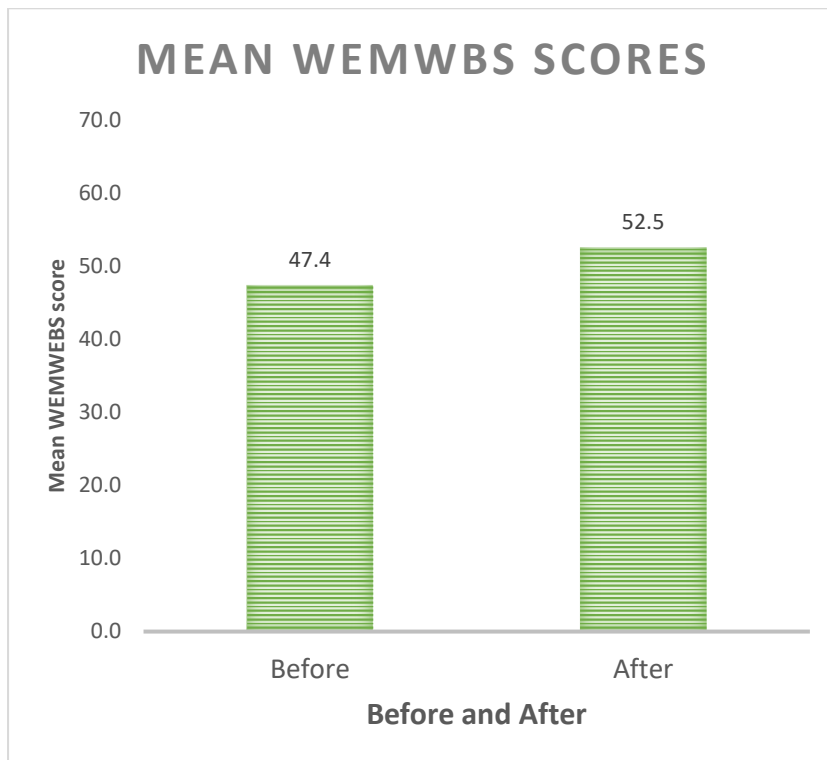


Figure 6

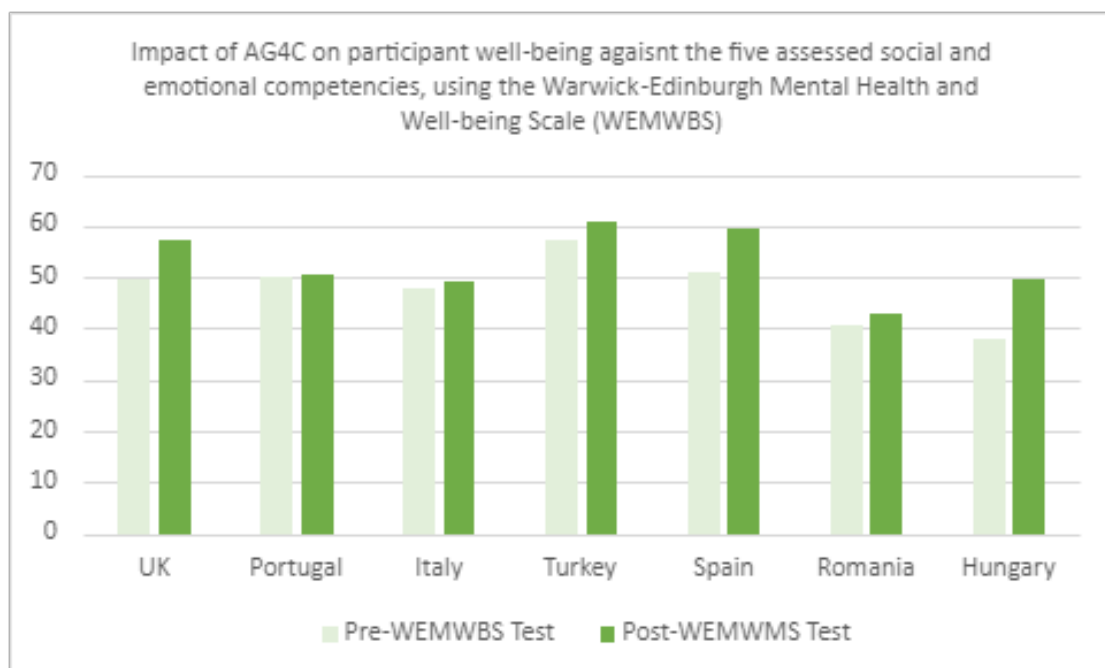


Figure 7

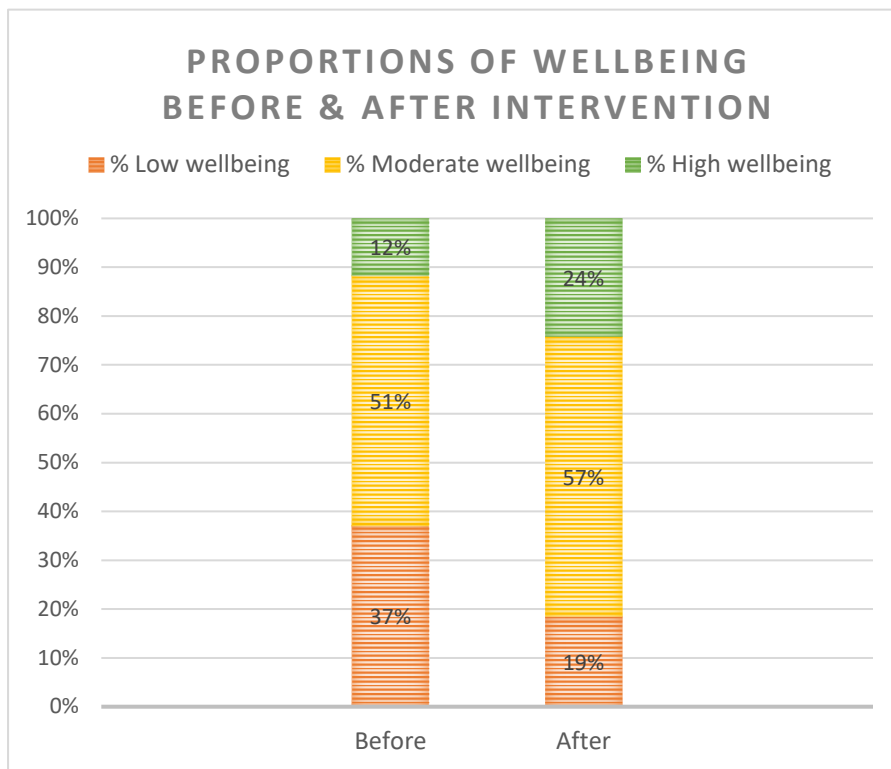


Figure 8

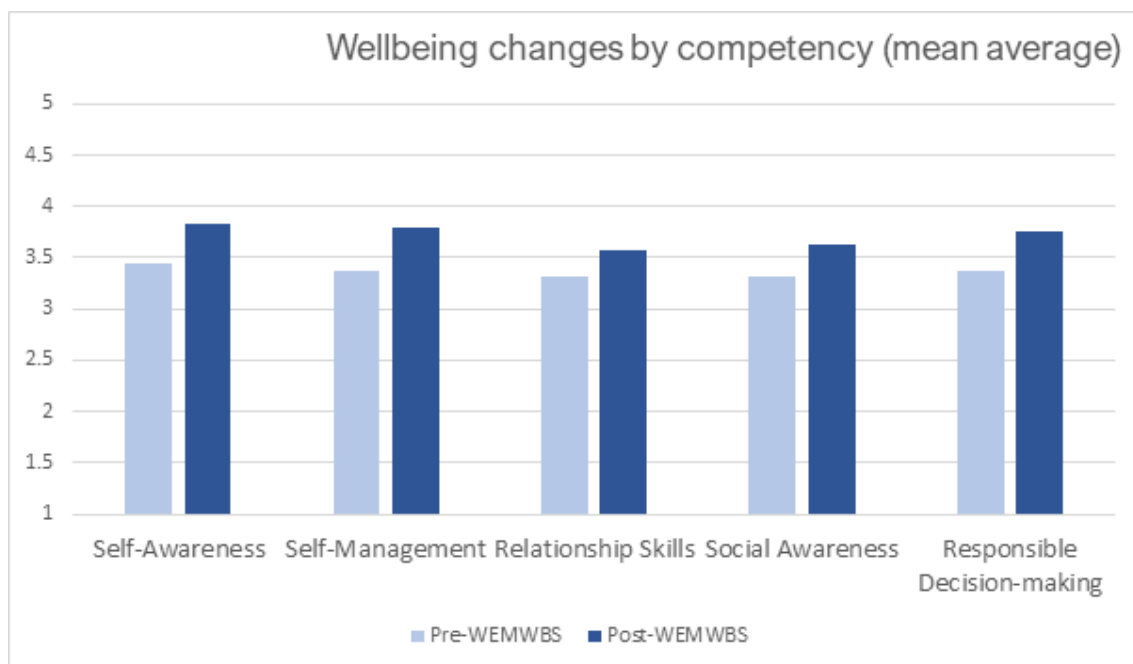


Figure 9

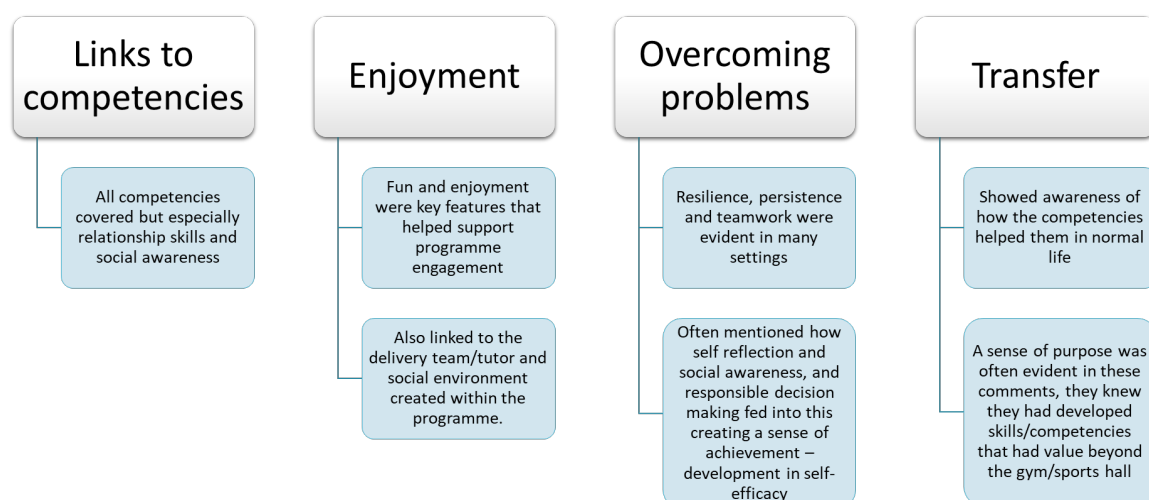


Figure 1. The complex nature of emotions from young people who were incarcerated (ahmed Shafi, 2019).

Figure 2. CASEL's Five Core Social and Emotional Competencies adapted from <https://casel.org/what-is-sel/> and used as a basis for the social and emotional competencies to be developed through the AG4C project.

Figure 3. The process for training and testing the materials in settings in the 7 countries.

Figure 4. An example of one of the 18 games cards (back and front) with QR code linking to the YouTube practical demonstration of the game as well as assessment of the competencies.

Figure 5. Graph presented using aggregate mean scores for pre and post AG4C from across all partner countries.

Figure 6. Before and after WEMWBS for each country (mean averages).

Figure 7. Proportion of well-being pre and post AG4C.

Figure 8. Pre and post mean average against each social and emotional competency from across the dataset.

Figure 9. Themes from the qualitative data from the young people.