Theory of Change in Sports-Based Urban Youth Programs: Lessons from Creating Chances FREE

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Summary

Sports-based positive youth development (SB-PYD) programs are health promotion programs that intentionally use sports to build life skills and leadership capacity among young people at risk of social exclusion. The defining characteristics of SB-PYD programs are that they are strengths-based, holistic, and use sports as a vehicle to maximize young people's health, social, and educational outcomes. SB-PYD programs aim to enhance modifiable social determinants of health (such as social inclusion) by explicitly addressing three Ottawa charter action areas; strengthening community action, developing personal skills, and creating supportive environments. These programs have been increasingly implemented since the early 2000s to address the United Nations' sustainable development goals.

Despite their growth, research indicates that SB-PYD programs are often designed, implemented, and evaluated without evidence-based theories of change. An evidence-based theory of change is a visual depiction of a program's assumptions, activities, contextual factors, and outcomes supported by scientific findings. A lack of evidence-based theory of change becomes problematic at the implementation phase when practitioners are trying to determine if their programs should be adapted or fixed. Without an evidence-based theory of change, practitioners are making changes based on their intuition, which limits program outcomes.

However, the process of developing a theory of change is time-consuming and resource intensive. Multiple calls to action have been made for SB-PYD practitioners who have successfully developed evidence-based theories of change to share their process with others in the field. This will provide a blueprint for other SB-PYD practitioners to develop and articulate their own theories of change to optimize program development and adaptation.

Traditional translational research models assume the development of an evidence-based theory of change is the first step in a linear process of developing a sustainable health promotion program. However, in the 2010s, researchers started to observe that the development and adaptation of health promotion programs was rarely a linear process in reality, and that case studies are needed to provide empirical support for this claim. It is valuable for SB-PYD practitioners to consider the benefits of using translational research to develop and revise evidence-based theories of change for programs at any stage of implementation to maximize their public health impact.

Introduction

Sport for development (S4D) is an approach to health promotion that has been increasingly used since the early 2000s to address the United Nations' (UN) sustainable development goals, yet it remains relatively under-researched (Coalter, 2013; Schulenkorf et al., 2016). S4D is defined as the purposeful "use of sport to exert a positive influence on public health, the socialisation of children, youths and adults, the social inclusion of the disadvantaged, the economic development of regions and states, and on fostering intercultural exchange and conflict resolution" (Lyras & Peachey, 2011, p. 311). A 2019 study by Whitley, Farrell et al. (2019) noted the rapid growth of organizations, networks, initiatives, and events within the field, which was illustrated by an increase from 176 registered organizations delivering S4D programs worldwide in 2010 to over 950 organizations in 2019.

In 2015, the UN released a report acknowledging the role of S4D in contributing to the 2030 Agenda for Sustainable Development (Dudfield & Dingwall-Smith, 2015), and recommended the use of sport as a vehicle to promote tolerance and respect for marginalized groups, empower women and young people, and achieve health, education, and social inclusion objectives. S4D programs are underpinned by the social determinants of health framework, which assumes a person's health is influenced by the conditions in which they are born, live, and work, such as socioeconomic status, ethnicity, cultural orientation, gender, education, social connection, and social inclusion (Marmot, 2017). S4D programs aim to enhance modifiable social determinants of health (such as social inclusion) by explicitly addressing three Ottawa charter action areas: strengthening community action, developing personal skills, and creating supportive environments.

- *Strengthening community action*: Most S4D programs are designed using a participatory approach and focus on building social cohesion and community development (Whitley, Farrell, et al., 2019). They do this through creating community partnerships intended to provide pathways for young people to expand their social participation beyond the program (Nathan et al., 2013).

- *Developing personal skills:* S4D programs are underpinned by health promotion principles of empowerment and capacity building with a focus on facilitating the development of life skills, such as communication and resilience, that people need to maximize their participation in society and experience social inclusion.

- *Creating supportive environments*: The positive social climate and social relationships created in S4D programs are integral to achieving positive social outcomes such as social inclusion (Coalter, 2015). This is important because social inclusion is a protective factor for good health (Marmot, 2017; Wilkinson & Marmot, 2003).

A variety of nomenclature has been used over the years to denote what Whitley, Farrell et al. (2019) referred to as the "movement of sport for development," including sport for development and peace, sports-based youth development, and sport for social change. Some of the terminology reflects the focus of programs' initiatives, or theoretical bases upon which program design is developed. One such area of focus is the use of sports-based programs to build young people's life skills and leadership capacity. This approach is called sports-based positive youth development (SB-PYD; Garst et al., 2016; Rauscher & Cooky, 2016; Waid & Uhrich, 2020). Positive youth development is common in health promotion for youth strategies, thus SB-PYD ties together health promotion and S4D (Bunde-Birouste, 2019). The distinguishing characteristics of SB-PYD programs is that they are holistic, strengths-based, and use sport to provide opportunities for young people to enhance existing life skills and build relationships to maximize their social, educational, and employment outcomes (Bean & Forneris, 2016; Bruening et al., 2015; Bruner et al., 2017; Holt et al., 2017). SB-PYD programs are prioritized for socially disadvantaged young people, including those from Indigenous communities and refugee and migrant backgrounds, who are at high risk of social exclusion (Sherry, 2010; Sherry et al., 2015, p. 1). Despite their alignment with health promotion principles, research indicates that SB-PYD programs are often designed, implemented, and evaluated without using robust program theory.

Whitley, Massey, et al. (2019) conducted a systematic review of 50 SB-PYD program evaluations across six global cities (Whitley, Massey, et al., 2019). Among their findings was evidence of the lack of program theory (Whitley, Massey, et al., 2019). Another systematic review of 9,483 academic and gray literature articles evaluated SB-PYD program outcomes and concluded that the quality of evidence in the field is poor, in part due to a lack of program theory (Laureus Sport for Good, 2018). A lack of program theory becomes problematic at the implementation phase when practitioners are trying to determine if their program should be adapted or fixed. A recent study by the Laureus Sport for Good Foundation (2018) suggested that without an evidence-based program theory practitioners are making changes based on their intuition, which limits program outcomes. There have been multiple calls to action for SB-PYD practitioners to develop and articulate evidence-based program theories that account for context to improve the quality of evidence that guides program adaptation in the field (Elsemann et al., 2017; Jacobs & Wright, 2018; Jones et al., 2017; Whitley, Farrell, et al., 2019; Whitley, Massey, et al., 2019).

The purpose of this article is to use an Australian SB-PYD program, Creating Chances (CC), as a case study for the importance of SB-PYD programs having an evidence-based program theory to guide program development and adaptation. The article uses Kemp's (2019) model of translational research to walk the reader through CC's journey of developing an articulated, dynamic, and evidence-based theory of change. The hope is that this will provide a blueprint for other SB-PYD practitioners to develop and articulate their own theories of change. The authors of this article are both researchers and practitioners of SB-PYD, and so their learnings are valuable to a broad audience of actors in the field.

There are four main sections to this article. The first provides the reader with a brief theoretical foundation on program planning and evaluation and translational research. The second describes Creating Chances as a case study. The third illustrates how Creating Chances used a theory of change to effectively progress through Kemp's phases of

translational research in a nonlinear fashion. The fourth section provides recommendations for health promotion practitioners on program development and adaptation in light of lessons learned from Creating Chances.

Theoretical Foundation

In the context of this article, the following terms are used; program theory, evidence-based program theory, theory of change, evidence-based theory of change, and program logic model. This section will define those terms, the relationships between them, and their relationship to translational research.

Definitions

- **Program theory:** A program theory outlines the beliefs and assumptions of a programs' activities "in terms of a phased sequence of causes and effects" (Weiss, 1997, p. 501).

- **Evidence-based program theory**: A program theory that is "supported by scientific evidence that describes how risk factors will be reduced and protective factors will be developed and enhanced through" the program (United Nations, 2009, p. 50).

- **Theory of change**: A theory of change is a visual depiction of the program's assumptions, activities, contextual factors, and outcomes (Connell & Kubisch, 1998; Rogers, 2014; Stein & Valters, 2012; Weiss, 1997). There are three fundamental questions answered by a theory of change: Who is the program prioritizing? What does it intend to do? How does it intend to do this? (Hernandez, 2000).

- **Evidence-based theory of change**: An evidence-based theory of change is a theory of change that is supported by scientific evidence.

- **Program logic model**: A program logic model demonstrates how a program works in greater depth by depicting the explicit relationships between a programs' inputs (organizational resources), activities (what the program does), outputs (tangible products), outcomes, (short-term change), and impact (long-term change) (Muir & Bennett, 2014).

Relationships Between Terms

The program theory is typically presented in written form and is the broadest outline of the program outcomes, mechanisms, and predictive factors (Connell & Kubisch, 1998; Weiss, 1997). It documents who the program prioritizes, what it aims to achieve, and how and is used to orient program development. The theory of change is a visual model of the program theory that is shared among key stakeholders to provide transparency and ensure they are working toward broader common goals. A theory of change aligns to and is the foundation for the program logic model (Muir & Bennett, 2014). The logic model is more detailed than the theory of change and is designed to provide actionable steps for the practitioners to bring about intended outcomes. The logic model is used to guide program planning, implementation, monitoring, and evaluation (Coalter, 2006).

Translational Research

Developing an evidence-based program theory and theory of change is part of the first phase of translational research. Translational research is defined as "the movement of basic science into human research and human research into healthcare practices" (Kemp, 2019, p. 2). Translational research has traditionally focused on clinical health interventions and somewhat neglected social health interventions, limiting what is known about how scientific discovery can be effectively applied to develop and adapt social health interventions (Kemp, 2019). Kemp's (2019) model of translational research for social interventions (see figure 1) was developed to bridge this gap. It breaks down five key phases in the design and implementation of social health interventions while challenging traditional notions that translational research is a linear process.

The five key phases within Kemp's model of translational research for social programs are:

T0: Theoretical research; involves literature reviews, needs assessments, and the conceptualization of the program theory, theory of change, and logic model.

T1: Translation to human; tests the relevance of the theoretical theory of change to the priority population through proof of concept and pilot studies.

T2: Translation to clients; the effectiveness of the intervention is more rigorously tested through controlled research trials.

T3: Translation to practice; research focuses on how to effectively adopt/adapt interventions demonstrating benefits in a research setting to real-world settings.

T4: Translation to the community; involves rapid-cycle research focused on sustaining the positive impacts of the intervention once it is taken to scale.

	Translation from basic theory and evidence to human studies			Translation of new practices/programs into the clinic/community, health decision-making and implementation research	
SOCIAL INTERVETION DEVELOPMENT AND RESEARCH	**T0**	**T1**	**T2**	**T3**	**T4**
	Evidence and theoretical reviews	Proof of concept and pilot studies	Hybrid research models and pragmatic trials	Adoption studies Comparative effectiveness studies	Action research/rapid cycle evaluation Population-level implementation and outcomes monitoring and research
	Defining mechanism, outcomes, and theory of change	New methods of diagnosis, treatment, and prevention	Controlled studies leading to effective care	Delivery of recommended and timely care to the right clients	Sustainable, quality adoption and outcomes

Figure 1. Kemp's (2019) model of translational research for social programs adapted for relevance to SB-PYD programs.

Source: Courtesy of distinguished professor Lynn Kemp.

Although conceptualized as linear, progressive steps, the Creating Chances case study will illustrate the more nonlinear and iterative processes undertaken in real-world program development and implementation.

Creating Chances Program Description

Creating Chances (CC) is a school-based SB-PYD program that uses sports to build life skills among socially disadvantaged young people ages 8–18 years in Australia's most populous state, New South Wales. CC provides participants with Lerner and Lerner's (2013) "big 3" characteristics of positive youth development: (a) enriching adult-youth mentorship, (b) life skills capacity-building activities, and (c) opportunities to develop and demonstrate meaningful leadership within their community. A meta-analysis by Holt et al. (2017) confirmed that positive youth development programs with these "big 3" characteristics were associated with improved psychosocial outcomes.

The Holt et al. (2017) meta-analysis also confirmed that transfer activities are important for positive youth development, so these are provided by CC. Each CC program consists of 10 weekly sessions, which contain on-field and off-field components. During the on-field component, trained facilitators build young people's understanding of a key life skill. Participants then go onto the sports field where they are encouraged to demonstrate that key life skill through fair-play sport. Lastly, youth participate in transfer activities where they learn how to apply life skills acquired on the sports field to their daily lives, such as in a school, family, or community setting (Deane & Harré, 2014).

The CC program operates in more than 65 high schools and 43 primary schools and reaches approximately 5,000 young people annually. This article retrospectively illustrates how the CC theory of change developed and evolved through a translational research lens. This analysis supports the importance of each phase of Kemp's adapted model of translational research for health promotion programs (see figure 1) while challenging traditional notions that these phases should occur in a linear progression.

Program Development and Adaptation

TO + T1: Theoretical Research + Proof of Concept and Pilot

CC evolved from Football United (FUn), a football for social inclusion program founded by Dr. Anne Bunde-Birouste at the University of New South Wales (UNSW) in 2006. FUn's original intention was to use football to welcome newly arrived refugee and migrant youth (and their families by extension) to Australia. The structured process in which this vision turned into a social program was reviewed and documented using analytic autoethnography in Dr. Bunde-Birouste's doctoral thesis (Bunde-Birouste, 2013). Analytic autoethnography is "an emerging method that supports the practitioner-researcher to be subjectively and fully engaged within

the action being studied" (Bunde-Birouste, 2019, p. 17). Dr. Bunde-Birouste's autoethnography study represented the T0 theoretical research and T1 translation to human phases of Kemp's model of translational research and demonstrates how theoretical research, proof of concept, and pilot testing often occur in tandem to develop a program situated in the needs of stakeholders and accounting for setting-level contextual factors. Bunde-Birouste used multiple data sources in her situational analysis of Football United as per Clarke's (2003) ecological framework. These sources included emails, meeting minutes, observation notes, interviews, and group discussions (Bunde-Birouste, 2013). Email tracking and analysis of meeting minutes allowed the voices of key stakeholders in the fields of football, refugee settlement, and community support to be represented in the research. Participant observation notes were taken by Bunde-Birouste herself, staff (steering committee members and program facilitators), and volunteers to gain a 360-degree perspective on the happenings of Football United. Bunde-Birouste conducted key informant interviews with experts in the fields of football, refugee settlement, and community support using her own personal network and then snowballing from the networks of others.

To explore end-user perceptions of the idea of a football for social cohesion program for refugee youth, Bunde-Birouste conducted focus group discussions with members of refugee support groups and young refugee football enthusiasts. These groups allowed young people to provide input into the design of the program. It also allowed Bunde-Birouste to gain a richer understanding of the challenges the priority population currently encounter or could foreseeably encounter. Journaling was an important part of Bunde-Birouste's process of reflecting on the data that emerged at each level (Bunde-Birouste, 2013).

The findings from the multiple data sources were corroborated using a process known as crystallization (Richardson, 1994). Richardson (1994) argues that this is the most appropriate approach to data analysis in autoethnography because it allows multifaceted data to contribute to a richer understanding of the whole phenomenon. The resulting learning from Bunde-Birouste's study led to the formation of the FUn's first theoretical model, depicted in figure 2.

The FUn theoretical model was an evidence-based program theory supported by the scientific evidence from Bunde-Birouste's study. The model broadly defined FUn's intended outcomes, program mechanisms, and predictive factors that facilitate outcomes. As seen in figure 2, FUn aimed to increase young people's engagement with school and their social inclusion. The FUn theoretical model identified child, family, program, and school factors that were found to facilitate these outcomes among program participants. For example, children who were prosocial, motivated to participate in Fun, and had positive peer relations and other-group orientation were more likely to achieve positive outcomes than those without these preexisting factors. The model also highlighted the importance of teachers engaging with the FUn program as a facilitator of positive program outcomes for young people.

The FUn theoretical model was valuable because it was used to get FUn programs implemented in community settings. It is common in the practice of health promotion, particularly SB-PYD, that programs are implemented in the real world before they are tested in a research setting. However, this is not to negate the importance of stepping backward to

empirically test at-scale programs. The FUn theoretical model was also valuable because it was used to develop a proof of concept (T1 phase of Kemp's model) for a trial of this intervention by Nathan et al. (2010; T2 phase of Kemp's model).
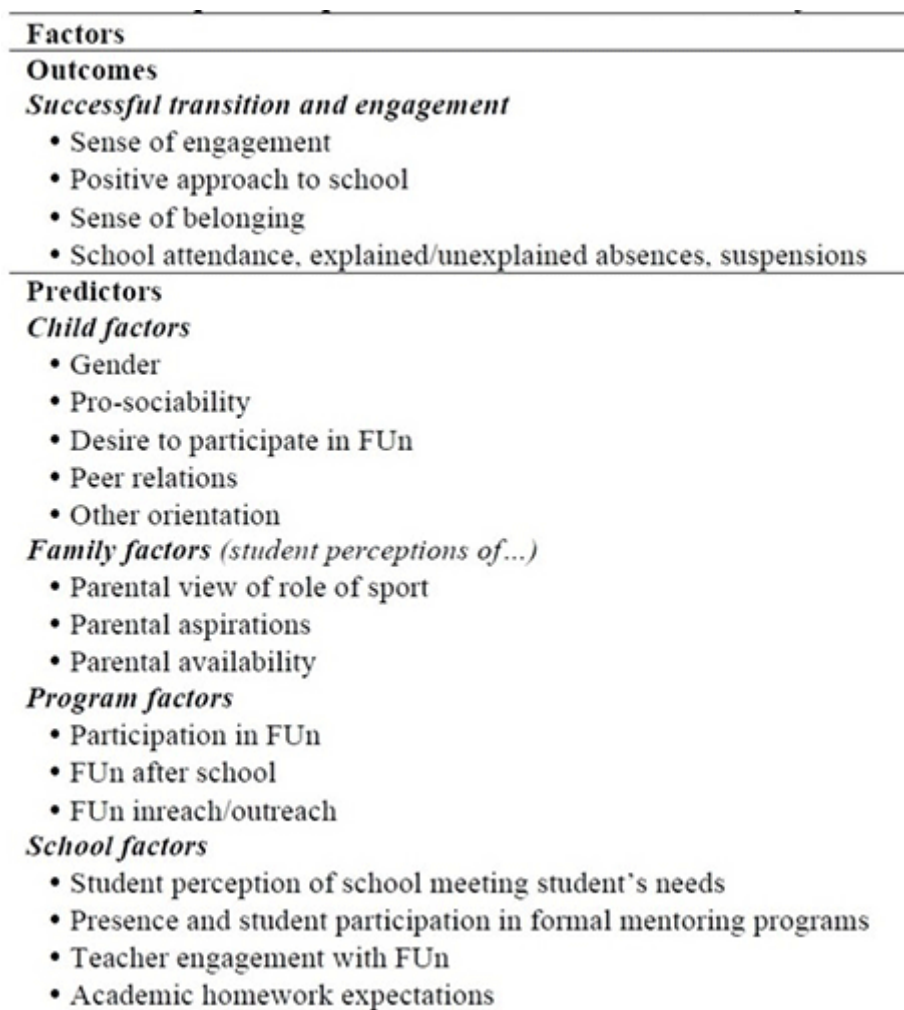
Factors

Outcomes

Successful transition and engagement
- Sense of engagement
- Positive approach to school
- Sense of belonging
- School attendance, explained/unexplained absences, suspensions

Predictors

Child factors
- Gender
- Pro-sociability
- Desire to participate in FUn
- Peer relations
- Other orientation

Family factors (student perceptions of...)
- Parental view of role of sport
- Parental aspirations
- Parental availability

Program factors
- Participation in FUn
- FUn after school
- FUn inreach/outreach

School factors
- Student perception of school meeting student's needs
- Presence and student participation in formal mentoring programs
- Teacher engagement with FUn
- Academic homework expectations

Figure 2. Football United theoretical model.

T2: Controlled Trial Testing

The UNSW researcher-practitioner team gained a unique opportunity to test the FUn theoretical model when they received an Australian Research Council (ARC) grant in 2009. The grant funded a three-year longitudinal study to test the impact of participation in the FUn program on individual well-being, social inclusion, and social cohesion, compared to a control (Nathan et al., 2010). The ARC study was a comparative trial and encompassed the translation to clients phase (T2), according to the Kemp model in figure 1. Few S4D programs have been adequately tested against a control (Hatton, 2015; Hills et al., 2019; Laureus Sport for Good, 2018). This was the first quasi-experimental study to our knowledge to evaluate the impact of an at-scale football-for-development program on social inclusion and social cohesion among refugee and migrant youth.

A mixed methods approach was chosen to test the FUn theoretical theory of change, which is best practice according to Creswell (2014). The selected qualitative method was face-to-face interviews with participants and other key informants (facilitators, teachers, school

counselors, school support staff, and staff from local youth and migrant resources; Nathan et al., 2010). Interview questions were focused on people's experiences and feelings toward FUn and sports as a tool to engage refugees with their local community (Nathan et al., 2010). These interviews purposefully mirrored those in Bunde-Birouste's autoethnographic study. The quantitative method was self-administered surveys consisting of an amalgamation of items from standardized Likert scales that were previously validated and proven reliable in prior research (Nathan et al., 2010). The scales measured resilience, other-group orientation, prosocial behavior, peer relations, and feelings of social inclusion. As seen in figure 2, these were defined as important predictors and outcomes of the FUn program in the theoretical theory of change. The qualitative and quantitative methods were cross-validated, resulting in key learnings about FUn's outcomes and processes.

The ARC study confirmed the researcher-practitioners' assumption that schools were the best setting to deliver programs as young people and their families were most familiar and comfortable with them (Nathan et al., 2013). The study found evidence that the program had a positive impact on leadership and life skills. This provided important learnings about the capacity for FUn to be redesigned as a positive youth development program. The ARC-funded study also found a dose-response relationship between participation and leadership, in that participants who were more regular attendees demonstrated greater prosocial behavior in terms of leadership, compared to participants who were less regular attendees (Nathan et al., 2013).

T3: Translating the Theory of Change to Practice

The UNSW researcher-practitioner team was able to translate the proven FUn theoretical model to practice through an evidence-based process of adaptation. The theoretical theory of change was considered in the Australian youth contextual frame using literature reviews, youth consultation, and key informant interviewing with teachers and program facilitators. These are rapid cycle evaluation methods. Rapid cycle evaluation means "assessing the effectiveness of programs more rapidly and . . . providing ongoing feedback to participating providers to support continuous quality improvement" (Shrank, 2013, p. 808). This process of adapting a program with demonstrated positive impacts in a research setting to suit real-world conditions represents phase T3 of Kemp's model (translation to practice).

There is tension in the literature regarding whether tested programs should be adapted to the real world using traditional academic research or rapid-cycle evaluation methods. Traditional academic research (randomized controlled trials) produces the most rigorous evidence, however there is a 17-year time lag between knowledge discovery and practical application (Green, 2008). This is not suitable for community-based programs, which need to be swiftly adapted to avoid becoming irrelevant (Aarons et al., 2017; Dariotis et al., 2008; Durlak & DuPre, 2008; Hallfors & Godette, 2002; Lee et al., 2008). Community health practictioners-researchers are increasingly using rapid-cycle evaluation methods to guide program adaptation because they provide learnings that are immediately actionable (Keith et al., 2017; U.S. Agency for International Development, 2010).

Through rapid-cycle learning it became clear that youth who were not refugees or migrants but still experienced social disadvantage were not receiving the life skills training needed to thrive in a complex, modern world (Australian Curriculum, Assessment and Reporting

Authority, 2012). This meant it was appropriate for FUn to broaden the "who" of their program to include all low-income youth. It also became clear that not all students preferred football. There was a strong interest in rugby. The UNSW researcher-practitioner team adapted by partnering with the Rugby Youth Foundation to develop Creating Chances as a separate entity from FUn in 2014. This evidence-based action meant broadening the engagement vehicle to include multisport positive youth development programs. From a theoretical perspective it meant going back to phase T0 (translational research) of Kemp's model and refining the theory of change.
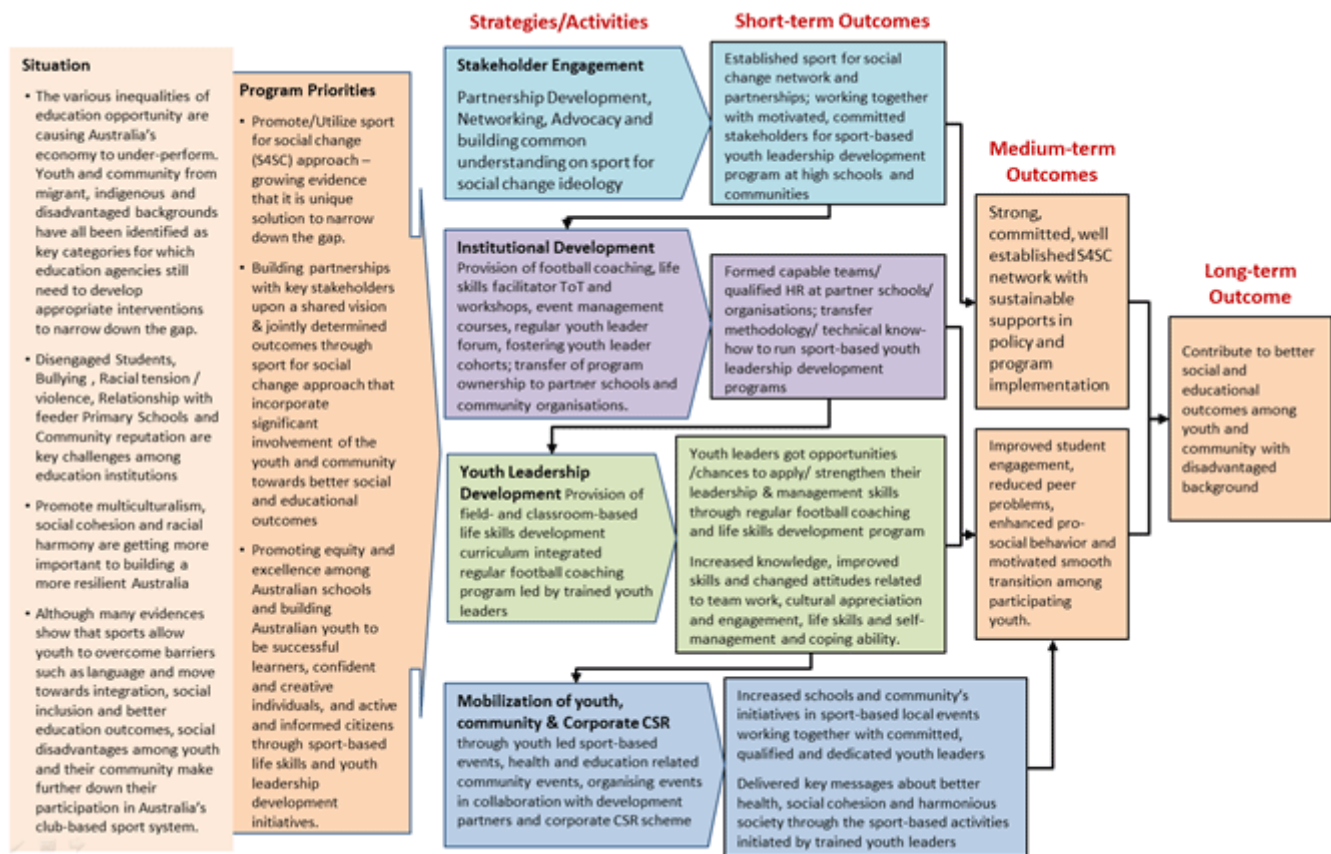
T4: Codified Tested/Proven CC Theory of Change

Figure 3. Creating Chances' first codified program theory of change.

The purpose of developing a program theory of change is to learn (Laureus Sport for Good, 2018), and this was true of the CC experience. In 2015 the UNSW team was able to codify over nine years' worth of iterative learnings about FUn/CC into the theory of change depicted in figure 3. In light of the definitions provided earlier in this article, figure 3 is a theory of change because it is a visual representation of the program theory. The development of the theory of change was a critical part of phase T4 of Kemp's model: translating evidence-based learnings to the community.

The theory of change was developed using the four key principles of designing a best practice program outlined by Hatton's (2015) InFocus Report on Sport for Development. First, the program was designed with the primary long-term social outcome in mind. CC carried on FUn's legacy of using S4D to promote social cohesion and inclusion. In the climate of a

progressively multicultural Australia and an increasingly xenophobic global situation, CC believed social cohesion needed to be the long-term outcome of its program. This provides a good example of how context was used to consider the objectives of a S4D program.

Second, the program was designed with the priority population in mind. As previously justified, this was all young people who experienced social disadvantage and barriers to participating in club-based sports. CC's field-based and academic learnings about disparities in youth outcomes in the NSW context informed their decision to define "promoting equity and excellence among Australian schools" as one of CC's program priorities in the program theory of change.

Third, the program was designed with youth safety and vulnerability as recommended by Hatton (2015). CC provides institutional development to ensure youth leaders, coaches, and volunteers are trained to deliver football activities that are credible and adhere to the Child Safe Standards defined by the NSW Government's Office of the Children's Guardian. This provides an example of how CC has adapted its program to suit public policy.

Fourth, the CC program was designed with sustainability in mind (Hatton, 2015). CC provides young people with coaching and leadership training so they are empowered with the capacity to run programs after they graduate as participants. CC employs youth leaders who were former program participants (Bunde-Birouste, 2019). This is how they transfer ownership to the local community and protect sustainability, a key result of the T4 phase of translation.

Also T4: From First Theory of Change to Program Logic Model

Phase 4 of translation involves iterative action research to ensure the program remains relevant (see figure 1). CC uses rapid-cycle methods to engage in reflexive learning about program fidelity, impact, and outcomes. This has been guided by the program logic model, which gave CC the parameters to consider whether their program was still doing what it intended to be doing or if there were ways it could be improved (within their capacity) to better serve the priority population. The Fixsen Triangle identifies this fidelity research as critical for consistent program implementation and improved outcomes (Fixsen et al., 2005). By the 2010s this became known as the Driver's Triangle (National Implementation Research Network, 2019).

CC takes a mixed methods approach to routine monitoring and evaluation (M&E), which is considered best practice in the field (Creswell, 2014). They collect program impact and satisfaction data from young participants, teachers who run programs in their schools, and trained program facilitators. Data from these three end users is triangulated to confirm the validity of their findings. Routine monitoring and evaluation is part of the T4 phase: translation to community.

This routine monitoring required detailed articulation of the program's inputs, activities, outputs, outcomes, and strategies for monitoring them—that is, the program logic model. The 2020 rapid cycle data collection methods used by CC as part of their M&E system included:

- youth consultation

- participant impact surveys measuring positive life skills, such as optimism, peer interactions, engagement with school and resilience. These are an amalgamation of standardized measurement scales that had been previously validated in the context of the ARC-funded FUn study (Nathan et al., 2010).

- teacher satisfaction and outcome surveys

- semistructured interviewing of head facilitators, youth participants, and teachers

- The Most Significant Change Technique (Heck & Sweeney, 2013)

- desk review of Australian government statistics and policy documents pertaining to vulnerable young people

- literature reviews of published findings in the fields of positive youth development and sport for development

Key Learnings and Actions

Using rapid-cycle methods, CC learned two ways they could better serve their priority population. First, they could deliver age-specific programs that catered to the developmental needs of young people at different life stages. This learning came from iterative feedback from their partners at the NSW Department of Education and their own field-based experience. They adapted by creating the 5 Stage Youth Development Pathway outlined in figure 4. This consists of a progressive suite of programs, each designed to support different stages of student development from grade 5–12.

Figure 4. Five-Stage Youth Development Pathway.

The second learning that came from CC's rapid-cycle evaluations was that youth unemployment was a burgeoning problem in Australia. Australian Bureau of Statistics (2019) data revealed the unemployment rate among young people ages 15–19 years was 17.7%, which is significantly higher than the total unemployment rate of 5.8%. The magnitude of this problem was also highlighted by the Foundation for Young Australians' (2018) finding that 50% of young people were not working full-time by the age of 25 despite being significantly more educated on average than previous generations.

CC adapted to address youth unemployment by developing the Future Pathways program in 2018. The Future Pathways program builds skills in work readiness, higher education study, and personal identity to equip young people in grades 11 and 12 with the skills needed to

successfully transition out of school. A key outcome of the program is that participants build a practical work readiness portfolio, including a written resume and interviewing skills that they can bring to job interviews.

CC codified these program adaptations by revising its program logic model in 2019 (see figure 5). The logic model in figure 5 differs from the theory of change in figure 3 in terms of content and depth of detail, as logic models provide more explicit and actionable steps to guide health promotion practice. Figure 5 is the global logic model for the whole suite of CC programs. Each of the five programs has an individual program logic model to guide its tailored components. It should be noted that the global logic model was still operating on a theoretical basis in 2019, as there had yet to be a participant who had progressed through all five programs. CC continually collects data to analyze and revise both the theory of change and program logic model as needed.
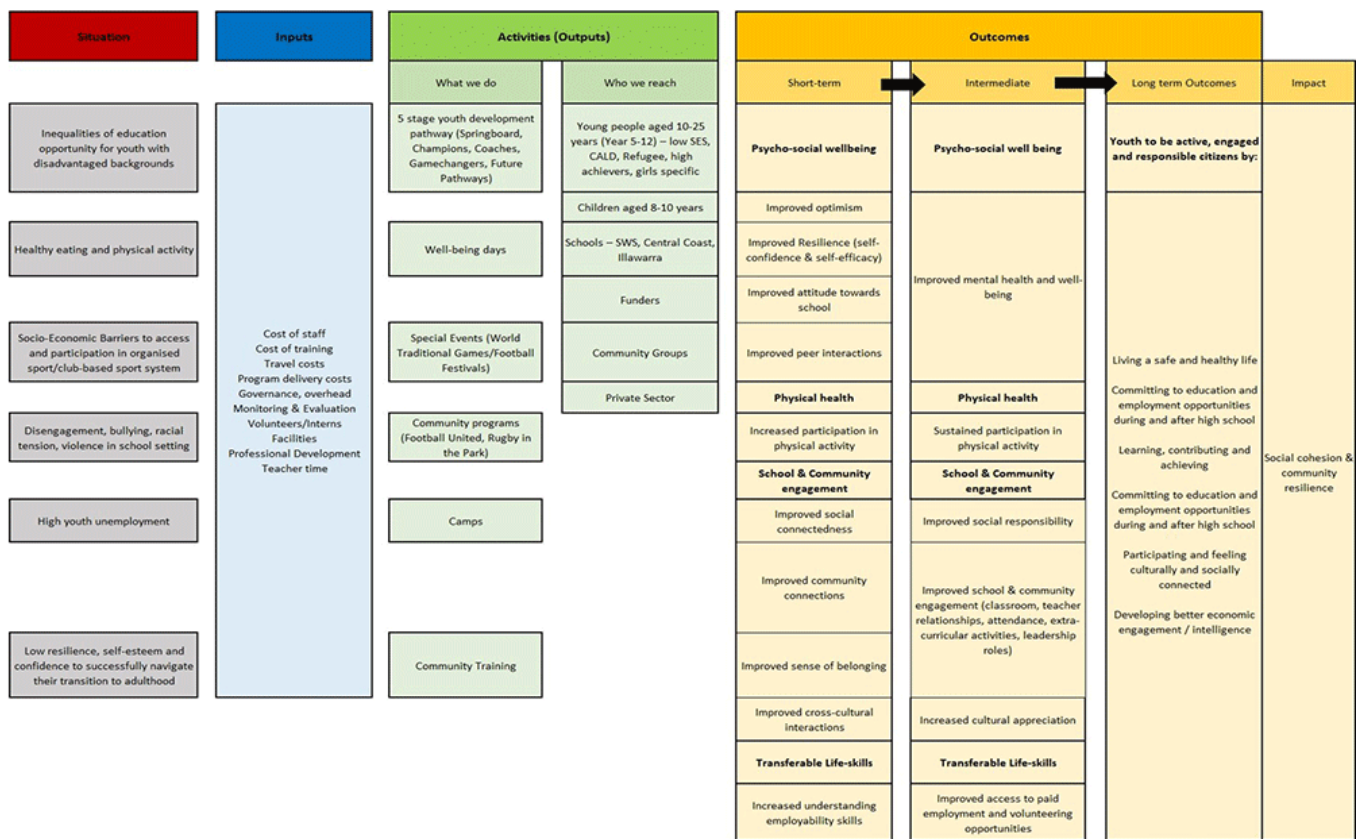

Figure 5. Revised Creating Chances program logic model.

Discussion

The theory of change and logic model development, testing, and implementation of the CC program clearly demonstrates that linear progression through the development and research stages of translational research is not necessary for quality health promotion programs. Linear progression can risk negating the value of practice and population-based knowledge that supports the delivery of timely care to the right clients. However, the process described also highlights the importance of undertaking all components of translational research in producing a sustainable program.

Some elements of the revised CC theory of change were proven in the ARC-funded study, whereas several new elements have yet to be tested. This reflects the reality that it is not always feasible for health promotion practitioners to stop program implementation until effectiveness trials have verified new program elements. The processes of practice and research must occur in tandem. Health promotion practitioners often engage in a nonlinear process of making program adaptations based on the best available evidence from rapid learning methods, then working backward to conduct effectiveness trials and retrospectively analyze those adaptations.

CC's nonlinear order of translational research can be described as follows: monitor and evaluate at scale programs to guide iterative, evidence-based program adaptations (T4) and refine the mechanisms of change articled in the theories of change/logic model (T0 + T1), which will need to be tested through controlled studies and effectiveness trials (T2+T3) while practice and evaluation continue (T4). It is not concerning that this is nonlinear because in the end all necessary research phases will have been covered and it is an ongoing process. The theories of change and developed logic model serves to provide an evidence-based yet flexible and adaptable program that continues to develop to meet the changing needs of its priority population.

A Boat Analogy: Drift or Purposeful Direction

This section introduces a boat analogy to articulate the benefits of developing a dynamic theory of change as experienced by CC. In this analogy the organizational capacity of the program is the boat, the priority population is its passengers, its intended outcomes are the destination, and the activities are the route.

An early benefit of having a testable theory of change was that it gave CC a framework to reconsider who could benefit from their program in light of the available evidence. It became clear that all disadvantaged youth could be program beneficiaries and so CC expanded the type of passengers taken on board beyond refugee and migrant youth. Having the articulated theory of change and accompanying logic model allowed them to verify they had the capacity to do so.

Having a dynamic, articulated theory of change also gave CC the framework to reconsider the destination of their journey. When CC was formed, the destination they were sailing to was social cohesion and life skills development. However, in 2018, they decided they should sail to an even broader destination, which included youth employability, a key outcome for the priority population. Having a dynamic, articulated theory of change was beneficial as it allowed them to expand their program's aims within the capacity of the organization and in ways consistent with the proven theory of change, which kept them from drifting with the winds and the tides.

Having a dynamic theory of change allowed CC to quickly and effectively adapt their program activities. Through teacher feedback they learned that young people began to demand a multisport approach to positive youth development. They adapted the vehicle of their program accordingly. CC also learned that they could maximize positive youth development by delivering age-specific progressive programs. The 5-stage Youth Developmental Pathway became the new route of their journey.

CC reached a stage where they had to revise their theory of change and test it to determine whether it was still taking them to the right destination. In this analogy, the revised theory of change was the map guiding them through new winds. The map needs to be verified or they could just drift with the winds. More importantly, unless a program's theory of change is tested it can remain forever theoretical and unsustainable.

The CC theory of change has been shared with all staff, volunteers, and youth leaders who delivered the programs, to ensure the program theory was understood and owned by all stakeholders as per best practice (Elsemann et al., 2017; Hills et al., 2019). This transparency and engagement of key stakeholders is part of maintaining program quality and ensures they are all part of a cohesive team steering the boat toward the same destination.

Recommendations to Health Promotion Practitioners

Health promotion practitioners can use lessons from CC's experience to retrospectively develop and articulate their own dynamic, evidence-based theories of change and logic models to optimize adaptation and implementation. This could improve the consistency of program direction and change, the rigor of programs, and, most important, maximize outcomes for participants in this space. Health promotion practitioners should consider adopting Kemp's (2019) model of translational research to guide their program development and adaptation given its appropriateness for the field. It is important for SB-PYD practitioners to acknowledge that program implementation is never a linear journey. Changing contexts can act like winds drifting your boat off course. This is why it is recommended that health promotion practitioners conduct rapid-cycle evaluations to swiftly detect and adapt to change (T4, translation to community).

If change is detected, practitioners should go back and revise their theories of change and logic models (T0, theoretical research) to guide at-scale program adaptation (T4, translation to community). In reality, the monitoring and evaluation of health promotion programs involves moving back and forth between T0 (theoretical research) and T4 (translation to community). However, practitioners should still conduct rigorous pragmatic trials and adoption/adaption studies (T2 and T3) when their programs are at scale to confirm their programs are efficacious and sustainable.

Conclusion

This article reviewed CC's experience to advocate for SB-PYD practitioners to develop a dynamic, evidence-based theory of change to guide adaptation and an articulated logic model to guide action. The article builds on a body of implementation science literature that supports social programs being adaptive rather than fixed (Glasgow et al., 2012; Glasgow & Riley, 2013; Ilott et al., 2013; Valente et al., 2015). Having a dynamic, evidence-based theory of change improves program quality and outcomes at the phase of adaptation, which supports assumptions from the Laureus (2018) and Whitley Massey et al. (2019) systematic reviews. CC's experience highlights the nonlinearity of the "research to adaptation journey," while validating the necessity of developing and testing theories of change and their ensuing logic

models. Although this article describes one program's experience, CC has overcome common challenges in the field of SB-PYD and some lessons may be of value to other practitioners when correctly considered in context.

Acknowledgments

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