The My Strengths Training for Life™ program: Rationale, logic model, and description of a strengths-based intervention for young people experiencing homelessness

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ABSTRACT

Traditionally, UK housing services have focused on providing temporary accommodation, identifying risk factors, and preventing negative outcomes to young people experiencing homelessness. However, deficit approaches may lead young people to becoming dependent on services and face greater marginalization and stigmatization. Meeting long-standing calls to focus more on young people's positive attributes and abilities, the My Strengths Training for Life™ (MST4Life™) program was developed as a community partnership with a large housing service. This paper describes the rationale, logic model, and content of the MST4Life™ program using the TIDieR (Template for Intervention Description and Replication) checklist. MST4Life™ is a strengths-based and experiential psychoeducation intervention for young people aged 16–24 years who are homeless or at risk. Grounded in positive youth development and basic psychological needs theory, its aim is to provide meaningful opportunities for participants to recognize, use, and further develop their mental skills and strengths. In turn, enhancing intentional self-regulation is expected to improve physical, mental, and social health and wellbeing, and support positive transitions to independent living. The potential long-term impacts include a reduction in the number of young people returning as homeless, lower rates of mental illness and mortality, and a cost saving to the public purse.

1. Background

Youth homelessness is a major issue in the UK and nearly half of all people supported by housing services are aged 16–24 years (Homeless Link, 2018). In this age group, homelessness occurs due to a complex set of structural barriers and societal factors including a shortage of affordable housing, family breakdown, inadequate education and health care, lack of jobs, low paying jobs, poverty, and socioeconomic status

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(Brallier, Southworth, & Ryan, 2019; Krüsi, Fast, Small, Wood, & Kerr, 2010). Young people experiencing homelessness are often exposed to violence, discrimination, poor physical and mental health, substance abuse, sexual victimization, and being unemployed, not in school or vocational training (i.e., NEET; Polillo & Sylvestre, 2021; Stewart, Reutter, Letourneau, Makwarimba, & Hungler, 2010). A reported lack of independent living skills, difficulty trusting service providers, fears of discrimination, low self-worth, and a lack of personal resources can further compound these issues (Addorisio et al., 2021; Homeless Link, 2018; Krüsi et al., 2010; Stewart et al., 2010). Moreover, young people who identify as lesbian, gay, bisexual, queer/questioning, or transgender (LGBQT+) represent 20–40% of the youth homeless population and experience more traumatic experiences prior to and during episodes of homelessness (Prock & Kennedy, 2020). The resulting social exclusion occurs at an important point of the young person's development, and this puts them at even greater risk for physical and mental health problems and reduced mortality in later life (Kulik, Gaetz, Crowe, & Ford-Jones, 2011; Roy, Haley, Leclerc, Sochanski, Boudreau, & Boivin, 2004).

Housing schemes provide temporary accommodation to young people experiencing homelessness and support them to make the transition into a stable housing situation, education, employment, or training (EET; National Housing Federation, n.d.). Without effective help, young people are at risk for developing lifelong dependencies on services to support their increasingly complex needs, and these services are becoming progressively less able to meet demands (Homeless Link, 2018). Support typically focuses on identifying risk factors and preventing negative outcomes by addressing specific problems (e.g., substance abuse, sexual health behaviors, poor mental health) or areas of deficiency (e.g., living skills; Slesnick, Dashora, Letcher, Erdem, & Serovich, 2009; Winiarski, Rufa, Bounds, Glover, Hill, & Karnik, 2020). But, preventing or reducing problems is not sufficient to prepare youth experiencing homelessness for their future (Roth & Brooks-Gunn, 2016). A focus on "fixing" a person's shortcomings can limit young people's autonomy and agency and lead to greater stigmatization and marginalization (Farrugia, 2010).

There have been long-standing calls from researchers and policy makers to use strengths-based approaches that recognize the resilience and strengths of young people experiencing homelessness (Keats, Maguire, Johnson, & Cockersall, 2012; Thompson, Ryan, Montgomery, Del Praddo Lippman, Bender, & Ferguson, 2013). Strengths-based practice does not ignore risks but is grounded in the positive psychology view that assets and resources exist within every person, even young people with a history of trauma and diagnosable emotional and behavioral difficulties (e.g., Bender, Thompson, McManus, Lantry, & Flynn, 2007; Epstein, 1998; Park & Peterson, 2008; Roebuck & Roebuck, 2016; Walker, 2015). For example, young people experiencing homelessness interviewed by Roebuck and Roebuck (2016) described strengths including solving problems in the face of adversity, planning for the future, and balancing the costs of engaging in certain behaviors. A key characteristic of strengths-based practice is the consideration for an individual's basic psychological needs for autonomy (i.e., the need for volition and sense of choice in one's actions), competence (i.e., the need to feel efficacious and believe that one's actions result in intended outcomes), and relatedness (i.e., the need to feel connected to others and integrated into a larger social whole; Deci & Ryan, 2002; Krabbenborg, Boersma, van der Veld, van Hulst, Vollebergh, & Wolf, 2017). By encouraging young people to identify, use, and/or develop their own strengths, interventions are theorized to promote intrinsic motivation, better enable young people to maintain a positive self-concept and be more resilient in the face of challenges and struggles (Walker, 2015).

Strengths-based practice has been applied to clinical and non-clinical samples and leads to positive outcomes and reduction in risk behaviors (e.g., Donovan & Nickerson, 2007). It has also increasingly underpinned youth homelessness interventions involving strengths-based assessment and case management support (e.g., Krabbenborg et al., 2017).

However, only a small number of interventions have so far been specifically developed for young people experiencing homelessness, meaning the knowledge base of what works, for whom, and why is still limited. There is also still a need for a youth-centered strengths-based intervention that provides young people with meaningful and empowering opportunities to practice using and further build their strengths.

While young people are capable of learning and demonstrating many personal and interpersonal strengths, the extent to which this occurs will depend on experiences, instructions, and opportunities for personal growth such as those offered by family, school, and/or community (Epstein, 1998). This is problematic for many young people experiencing homelessness, who by virtue of their marginalized status may experience less frequent and quality contacts with systems that would normally foster strengths (e.g., family, school, community). Although they will likely display a range of strengths (Bender et al., 2007; Roebuck & Roebuck, 2016), having greater self-awareness of these and access to them in meaningful ways would likely enhance coping with adversity and stress, reduce mental and physical health problems, and lead to other positive changes such as goal achievements (Park & Peterson, 2008). However, there is insufficient evidence to support these predictions and guide housing schemes in adopting strengths-based approaches within their services.

2. Aim

To fill these gaps, the purpose of this paper is to provide an overview of My Strengths Training for Life™ (MST4Life™), a strengths-based and experiential psychoeducational program for young people experiencing homelessness aged 16–24 years based on approaches more commonly used in sport. MST4Life™ was co-developed with young people and staff as part of a community-based participatory research (CBPR) project in partnership with a large UK-based Housing Service (Parry, Quinton, Holland, Thompson, & Cumming, 2021; Parry, Thompson., Holland, & Cumming, 2021; Quinton, Clarke, Parry, & Cumming, 2021). This paper describes the rationale, logic model, and content of the MST4Life™ program using **TIDieR** (**T**emplate for **I**ntervention **D**escription and **R**eplication; Hoffmann et al., 2014). The TIDieR is a 12-item checklist to provide fuller, more accurate, and standardized reporting of interventions so that they can be more effectively delivered in practice or replicated in research. Providing a detailed description of MST4Life™ is intended to facilitate policy makers, commissioners, program planners, and researchers in the uptake of this or similar strengths-based psychoeducational programs for young people experiencing homelessness or at risk; for example, young people with a history of adverse childhood experiences (ACEs), those who have been excluded from school and/or leaving care, young offenders or justice-involved youth, and NEET young people with mental health difficulties. In doing so, this paper makes an original contribution to youth homeless literature by using CBPR to develop, and TIDieR to describe, a multi-faceted strengths-based intervention for promoting the mental skills of young people experiencing homelessness.

3. Methods

3.1. Intervention design

CBPR was used to develop, deliver, and evaluate MST4Life™ by involving stakeholders (i.e., current/former young people experiencing homelessness supported by a housing service called St Basils, frontline and managerial staff, and outdoor adventure center staff) as equal and complimentary partners in the research. CBPR is a collaborative and mutually beneficial process that helps to close the gap between academic knowledge production and its practical use by communities, supporting them to adopt evidence-based practice in a sustainable way (Hacker et al., 2012). Information is shared, decisions made jointly at all stages of the research process, and the project builds on strengths of the

community. In this project, the Housing Service identified the initial need for the project: a gap in their service provision for young people who found it difficult to engage in education, work, and training. The Service initiated a dialog with us, the researchers, about adapting mental skills training (MST) from a sport setting to their supported accommodation sites. A community-academic partnership was formed in 2014 based on CBPR principles, which also improved the likelihood that a culturally sensitive intervention would be developed that was responsive to the needs of the local community (Israel, Schulz, Parker, & Becker, 1998; see Supplement Table 1 of Quinton et al., 2021 for how the development and delivery of MST4Life™ maps onto the nine principles of CBPR). Long-term sustainability plans were built into the partnership from the outset with a focus on capacity building in frontline staff, including support workers and specialist learning, skills, and work (LSW) coaches.

3.2. Intervention development

The program was iteratively developed through action research cycles, with initial formative work (January-March, 2014) involving a narrative literature review for the Service on the assets and skills, particularly resilience, needed by young people to overcome adversity and unstable housing to gain independence and thrive. In parallel, a consultation was undertaken with key stakeholders involving 6 focus groups with 15 young people (10 male, 5 female; all current residents of the Service) and 18 frontline staff (6 male, 12 female). The results outlined the main challenges faced by young people experiencing homelessness living in supported accommodation (e.g., pressures of the benefit system, difficult family circumstances, lack of confidence, and difficulties finding hope and motivation) and identified the mental skills required for successful transition into independence and social inclusion. It also identified practical suggestions for making the program appealing to young people such as being participant-centered, the need for including opportunities to develop social competence (e.g., engaging with different types of people), and involving predominately group-based, interactive, fun, and experiential activities.

Initial pilot work with 15 young people was then undertaken to establish the feasibility of a multi-faceted intervention consisting of 8 face-to-face weekly community-based sessions (Phase 1; April-June, 2014) and a 3 day/2 night outdoor pursuits residential course (Phase 2; September 2014). The results indicated that young people considered the MST4Life™ program and its evaluation methods to be acceptable and reported positive reactions to the approaches taken by program facilitators (Cumming, Clarke, Holland, Parry, Quinton, & Cooley, 2021). It also led to refinements to the intervention (e.g., increasing the number of sessions from 8 to 10 in Phase 1, increasing duration of Phase 2 to 4 days/3 nights).

3.3. TIDieR description of the 'My Strengths Training for Life™' program

3.3.1. Item 1: Brief Name
'My Strengths Training for Life™' (MST4Life™ program).

3.3.2. Item 2: Rationale, Theory and Aim of the Elements Essential to the Intervention

3.3.2.1. Rationale. Many young people experiencing homelessness will have a history of ACEs, which are traumatic events occurring in childhood that can contribute to deficits in social, cognitive, and emotional development. In turn, this can make it difficult to regulate emotions and cope with stressful events, increasing the likelihood for negative health outcomes in adulthood (Cameron et al., 2018; Radcliff, Crouch, Strompolis, & Srivastav, 2019) and chronic homelessness (Ferguson, Bender, Thompson, Xie, & Pollio, 2011). MST4Life™ is a strengths-based intervention based on mental skills training (MST),

which is a psychoeducational approach most often applied in sport for talent development and performance enhancement (Holland et al., 2018). Athletes do not need to have 'problems' or 'deficits' to work on their mental skills. Instead, MST is an opportunity for them to systematically develop, apply, and refine: (a) intrapersonal qualities such as confidence, resilience, and self-regulation; and (b) interpersonal qualities such as being able to work in a group and show respect for others to maximize their potential and cope with ongoing exposure to pressure and stressful situations (Hill et al., 2019). A mental skill is a regulatory capability that enables athletes to actively manage their thoughts, feelings, and behaviors through the application of cognitive and behavioral techniques such as goal-setting, planning, positive self-talk, and performance routines (Holland et al., 2010). Engaging in MST has been shown to improve learning and performance, positively impact self-confidence and wellbeing and can transfer to other domains such as school and family as an important set of life skills (e.g., Sharp, Woodcock, Holland, Cumming, & Duda, 2013). This approach has also been successfully applied in medicine, law enforcement, music, and dance, as well as the armed forces (e.g., Fitzwater et al., 2018; Ford & Arvinen-Barrow, 2019; Lin et al., 2020).

3.3.2.2. Theoretical framework. Informed by the formative work, MST4Life™ is underpinned by positive youth development (PYD; Lerner & Lerner, 2006), basic psychological need theory (BPNT; Deci & Ryan, 2002), and pedagogical theories of experiential learning (Dewey, 1938; Kolb, 1984). PYD is the strengths-based framework that informed the program's content and delivery. It is an approach to youth programming that promotes personal development, thriving, and growth by aligning the strengths and resources of young people with: (a) positive affective relationships with caring adults; (b) challenging experiences; and (c) skill-building opportunities offered through diverse activities and settings (Lerner & Lerner, 2006; Lerner et al., 2014; Roth & Brooks-Gunn, 2016). PYD is theorized to work by enabling young people to develop and deploy intentional self-regulation skills (i.e., mental skills) and therefore be better able to capitalize on opportunities within their environment through mutually beneficial person-to-context relations, termed adaptive developmental regulations (Napolitano, Bowers, Gestsdóttir, & Chase, 2011). Within this framework, mental skills are considered important assets for optimal development that support young people to navigate the many contextual changes (e.g., school transitions, access to drugs and alcohol) that occur during adolescence.

For young people to optimally develop, PYD also emphasizes the need to create appropriate environments (Lerner and Lerner, 2006). To facilitate positive relationships between program facilitators and young people, MST4Life™ supports young people's basic psychological needs for autonomy, relatedness, and competence (Deci and Ryan, 2002). Research in education and physical activity indicates the satisfaction of these needs by teachers and coaches are important ingredients for promoting optimal development, functioning, and health in young people (Diseth, Danielsen, & Samdal, 2012; Gunnell, Crocker, Wilson, Mack, & Zumbo, 2013). MST4Life™ facilitators are trained to support basic psychological needs by exhibiting behaviors that promote positive feelings of autonomy, competence, and relatedness, and limiting behaviors that might thwart these needs (Deci & Ryan, 2002). More specifically, program facilitators are encouraged to create an inclusive and needs supportive environment by providing regular opportunities to make personal choices and give input (autonomy-supportive); demonstrating acceptance, care, warmth, understanding, and respect for participants (relatedness-supportive); and providing clear instructions, guidance, positive expectancies, optimal challenges, and constructive feedback (competence-supportive; Taylor & Ntoumanis, 2007).

In contrast to more didactic "teach and tell" educational methods, MST4Life™ is also designed to promote experiential learning through young people interacting with the environment and self-discovery (Dewey, 1938). Kolb's (1984) four-stage learning cycle of concrete

experience, reflective observation, abstract conceptualization, and active experimentation is used throughout the program to develop existing and new mental skills in continuous cycles. This involves providing young people with planned activities to use their mental skills (i.e., *concrete experience*). The MST4Life™ facilitators then guided participants to examine and analyze this experience using reflective questions (e.g., "How would you describe your experience of this activity", "What personal strengths did you use during this activity"), and turn this experience into learning (i.e., *reflective observation*). These structured reflections encourage participants to interpret their experiences, apply meaning to them (i.e., *abstract conceptualization*) and then test out these ideas and interpretations in subsequent activities (i.e., *active experimentation*). Key psychological processes proposed to enhance transfer of learning are intentionally included in program delivery, including encouraging young people to notice when opportunities present themselves outside of MST4Life™ sessions and providing them with opportunities to apply this learning in other parts of their lives (Cooley, Cumming, Holland, & Burns, 2015; Cumming et al., 2021).

3.3.2.3. Aims. The aim of MST4Life™ is to provide young people experiencing homelessness with meaningful opportunities to recognize, apply, further develop and transfer use of their mental skills into different contexts. Based on the formative and feasibility work as well as the underpinning theories, core elements for program content and delivery were identified and included in the MST4Life™ logic model (Fig. 1). The logic model describes and graphically represents how the program is intended to work by aligning its target population, assumptions, inputs, activities, output, and outcomes (Kaplan & Garrett, 2005). It is intended to serve as a guide for monitoring and evaluation of programs to ensure effectiveness and accountability by helping people to understand its underlying "logic" (Fielden, Rusch, Masinda, Sands, Frankish, & Evoy, 2007; Kaplan & Garrett, 2005).

1. The *target population* is young people experiencing homelessness aged 16–24 years old and living in long-term supported

accommodation (e.g., 6–12 months), NEET and eligible to become EET (as opposed to NEET young people who are unable to participate in work due to disability or health condition) or at risk of falling out of EET, or identified by frontline staff as someone who would benefit from a group-based program to further develop their mental skills. This population group will often have poor mental health and other high support needs (e.g., substance abuse, learning difficulties, pregnant, or young parent; Homeless Link, 2018).

2. It is *assumed* that all young people experiencing homelessness have the capacity for growth and personal development, including those with a history of trauma and adversity, emotional and behavioral difficulties, and those at risk of becoming NEET. It is also expected that a strengths-based and experiential psychoeducational program would be an effective way of enabling young people experiencing homelessness to recognize, use and further develop their mental skills and transfer these to other life domains such as education, employment, and training (Parry et al., 2021). Finally, young people experiencing homelessness will be willing to participate in a strengths-based MST program but may require support from Housing Service staff to attend sessions and support their engagement (Cumming et al., 2021).

3. The planned work describes the *inputs and activities* that would enable young people to develop and transfer the mental skills into other settings (see TIDier item 4 for details).

4. The *outputs* of MST4Life™ are the direct products of the program inputs and activities, which in turn lead to beneficial *outcomes* and long-term *impacts*. For young people, the intended change is an increase in the intentional self-regulation of thoughts, emotions, and behaviors, which will be initially evident by attendance and engagement in sessions and by the number who have completed the program. Over the short term, this change will be further evidenced by young people gaining intrapersonal and interpersonal mental skills, which in turn will contribute to improved physical, mental, and social health and wellbeing (e.g., positive self-concept, greater resilience and perseverance), maintaining their accommodation
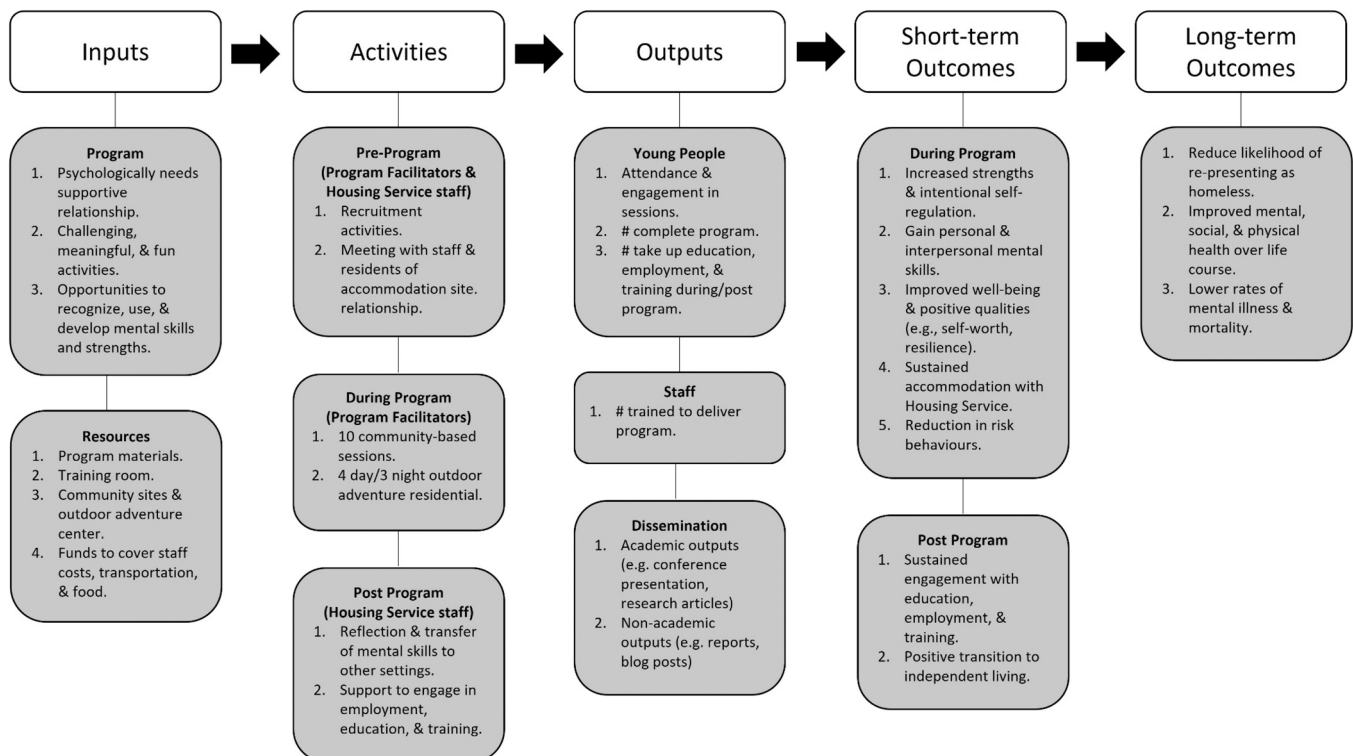

Inputs	Activities	Outputs	Short-term Outcomes	Long-term Outcomes
Program 1. Psychologically needs supportive relationship. 2. Challenging, meaningful, & fun activities. 3. Opportunities to recognize, use, & develop mental skills and strengths.	**Pre-Program (Program Facilitators & Housing Service staff)** 1. Recruitment activities. 2. Meeting with staff & residents of accommodation site. relationship.	**Young People** 1. Attendance & engagement in sessions. 2. # complete program. 3. # take up education, employment, & training during/post program.	**During Program** 1. Increased strengths & intentional self-regulation. 2. Gain personal & interpersonal mental skills. 3. Improved well-being & positive qualities (e.g., self-worth, resilience). 4. Sustained accommodation with Housing Service. 5. Reduction in risk behaviours.	1. Reduce likelihood of re-presenting as homeless. 2. Improved mental, social, & physical health over life course. 3. Lower rates of mental illness & mortality.
Resources 1. Program materials. 2. Training room. 3. Community sites & outdoor adventure center. 4. Funds to cover staff costs, transportation, & food.	**During Program (Program Facilitators)** 1. 10 community-based sessions. 2. 4 day/3 night outdoor adventure residential. **Post Program (Housing Service staff)** 1. Reflection & transfer of mental skills to other settings. 2. Support to engage in employment, education, & training.	**Staff** 1. # trained to deliver program. **Dissemination** 1. Academic outputs (e.g. conference presentation, research articles) 2. Non-academic outputs (e.g. reports, blog posts)	**Post Program** 1. Sustained engagement with education, employment, & training. 2. Positive transition to independent living.	

Fig. 1. Logic Model of MST4Life™ Program.

within the Service (e.g., fewer warnings and evictions), and reducing risk behaviors (short-term outcomes). By the end of the program, for example, it is expected that young people will be more aware of, and better able to set effective goals and plans for achieving them, recognize and use different coping strategies, activate different forms of social support, and work effectively with others. In support, a recent study showed that homeless young adults who experience more autonomy, competence, and relatedness report higher quality of life shortly after entering Dutch shelter facilities (Krabbenborg et al., 2017). More distal outcomes of MST4Life™ would be a positive transition to independent living (e.g., tenancy in a rented flat) and sustained engagement with EET. The potential long-term impacts include a reduction in the number of young people returning as homeless, lower rates of mental illness and mortality, and a cost saving to the public purse (Jabbour & Siu, 2019).

This logic model has been evaluated with ongoing outcome and process evaluations using a mixture of methods. Aligned with CBPR principles, the Housing Service was involved in the development of this evaluation plan, including identifying indicators of success and appropriate methods of data collection. Initially, data was collected via attendance records, field notes, and qualitative methods involving a semi-structured video diary during the program and separate focus groups for young people and support workers held following the program (see Cooley, Holland, Cumming, Novakovic, & Burns, 2014 for more information on semi-structured video diary rooms). The acceptability of these methods was explored in the pilot work and modifications were made based on the feedback from young people and staff prior to evaluation of the main program (Cumming et al., 2021). For example, it became evident that not all young people were comfortable being audio or recorded and were reluctant to engage in these qualitative methods without having first established trust and rapport. For the main program evaluation, questionnaires were therefore added at the start and end of the program (Quinton et al., 2021), and young people were provided with a range of options for engaging with the diary room (e.g., video-recorded, audio-recorded, written responses) (Parry, Thompson., Holland, & Cumming, 2021). Attendance is recorded to establish the amount of program received, and young people's engagement in these sessions are also rated by facilitators using a scale ranging from 0% (*not at all engaged in the session; did not participate and/or left*) to 100% (*completely engaged in the session; actively participated in all activities and discussions*). With the young people's consent, materials used in sessions such as strength profiles (Cooley, Quinton, Holland, Parry, & Cumming, 2019) as well as records kept by the Housing Service about their engagement in EET activities during and following their participation in MST4Life™ was also included in the evaluation (Jabbour & Siu, 2019).

To date, the evaluation has provided support for the MST4Life™ logic model by demonstrating that young people significantly improve their resilience and well-being, and these improvements are associated with their mental skills development (Quinton et al., 2021). After completing MST4Life™, young people were observed by Housing Service staff to be better mentally prepared for independent living, such as to think about their future ambitions and pursue relevant EET opportunities, as well as engage in wider services such as to address alcohol misuse (Parry et al., 2021; also see Appendix 1 for a case study). Evidence in support of improved longer-term outcomes includes MST4Life™ participants being two times more likely to transition into EET and independent living as compared to standard care by the Housing Service (Jabbour & Siu, 2019). But the real impact of the program is most evident from the perspective of the young people themselves, such as how one young person summed of the changes in their life experienced after completing MST4Life™:

I have literally two jobs now, own flat coming, like literally going to view it on my birthday in a few days. You know, I've got a girlfriend,

I've got my mates, my best friend, people around me, family who I need around me.

3.3.3. Item 3: Materials Used in the Intervention Delivery or in the Training of Intervention Providers

Program facilitators use activity sheets, PowerPoint presentations, and short videos to facilitate activities and discussions. Refreshments are also provided in each session. Young people receive a portfolio to store their completed session materials throughout MST4Life™ for future reference and as evidence of their learning to qualify for up to 6 credits towards an accredited life skills award. The MST4Life™ training manual for staff consists of: (a) session plans that describe the required materials, intended aims and learning outcomes, a description of the activity, and prompts for guiding reflections on the activities; (b) recruitment materials (e.g., posters); (c) delivery guide; and (d) frequently asked questions. With the young people's consent, weekly emails are also sent by program facilitators to housing project workers to keep them updated on young people's engagement with the program and the targeted mental skills.

3.3.4. Item 4: Procedures, Activities, and/or Processes Used, Including Enabling or Supporting Activities

Program facilitators are trained to deliver MST4Life™ using the CARES model (i.e., **C**ompetence supportive, **A**utonomy supportive, **R**elatedness and interpersonal involvement, **E**ngagement through communication, and **S**tructure and group management; see Fig. 2) developed for MST4Life™ and aligned with BPNT (Deci & Ryan, 2002). They are encouraged to engage in need supportive (e.g., providing opportunity for input and choice), rather than need thwarting, behaviors (e.g., being critical or negative towards participants, using controlling language, interrupting a young person while they are speaking).

The program is delivered over two phases. Phase 1 involves 10 weekly sessions (Table 1) designed to promote a number of mental skills using experiential learning approaches. The first session is an introduction to the program, with an emphasis on rapport building, creating an emotionally safe environment for participation by cocreating ground rules (e.g., everyone is treated respectfully, challenge by choice) and icebreaker activities. Sessions 2 through 10 follow a similar structure involving: (a) check-in with each young person; (b) recapping the mental skills previously developed and identifying examples of how young people used them outside of the session; (c) main session activity; and (d) guided reflections. Activities are designed to become progressively more challenging over the sessions to build young people's self-efficacy beliefs (Bandura, 1997). Earlier activities are simpler, shorter, and can be done independently (e.g., completing a strengths profile; see Cooley et al., 2019), whereas later activities are more complex and involve greater planning and group work (e.g., organizing a charity cake sale). Initial pilot work demonstrated attendance rates of 75% for Phase 1, which was considered to be highly successful by staff from the Housing Service when compared to other programs. The three main factors contributing to non-attendance included a lack of external incentives, lack of housing service availability to support young people to attend session, and individual characteristics of the young people. Suggesting that baseline difference may exist between those who participate vs. decline the opportunity, the pilot work also found that young people who were more likely to attend and engage with sessions were curious, open-minded, willing to prioritize it over other pursuits, and had enough confidence and enthusiasm to overcome initial fears of group work and trying something new (Cumming et al., 2021; also see Quinton et al., 2021).

Phase 2 involves a 4 day/3 night trip set in an outdoor adventure center to promote and/or further develop mental skills in a novel, fun, and challenging transfer of learning setting. It also capitalized on the wellbeing benefits associated with nature (Mygind, Kjeldsted, Hartmeyer, Mygind, Bølling, & Bentsen, 2019). Previous research has found
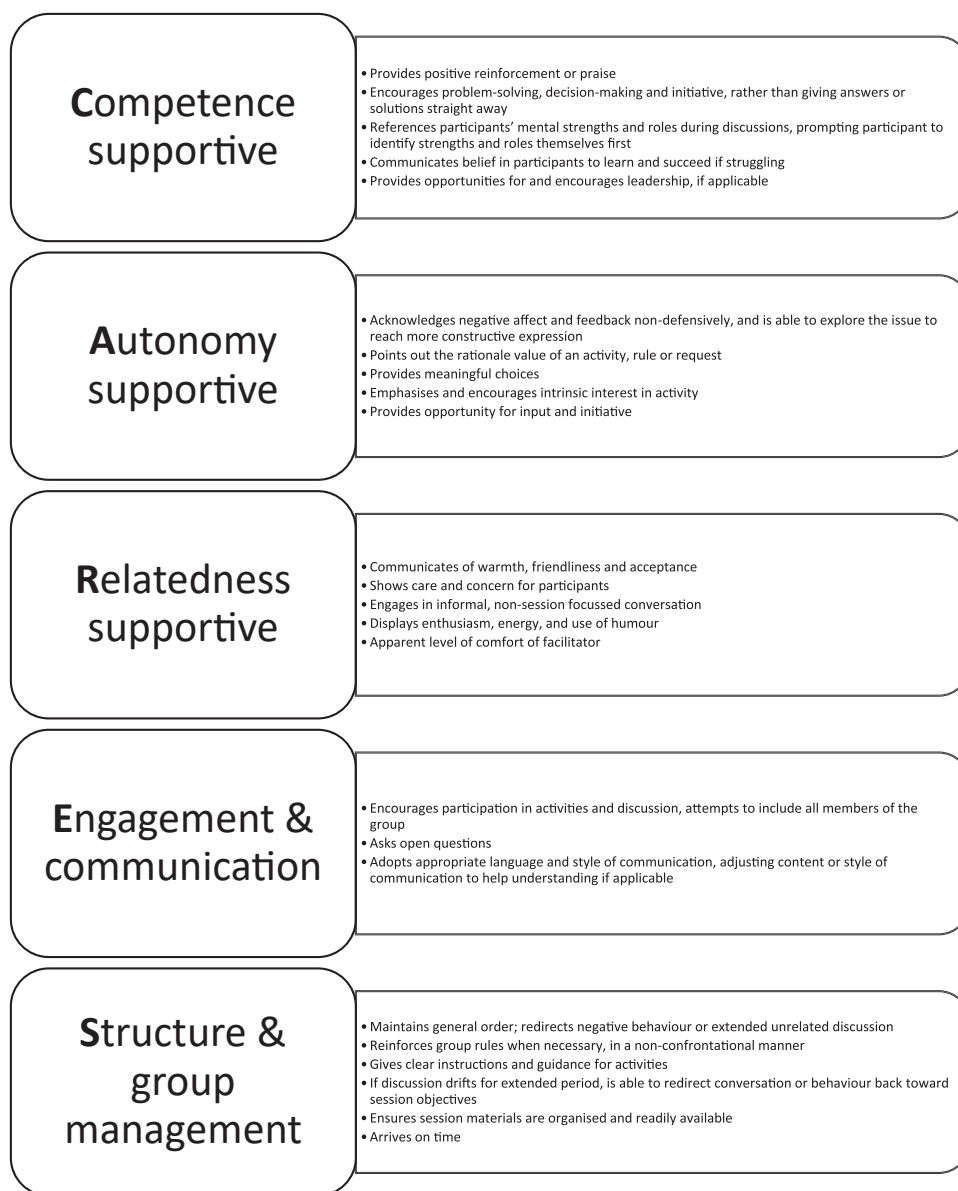
Competence supportive
- Provides positive reinforcement or praise
- Encourages problem-solving, decision-making and initiative, rather than giving answers or solutions straight away
- References participants' mental strengths and roles during discussions, prompting participant to identify strengths and roles themselves first
- Communicates belief in participants to learn and succeed if struggling
- Provides opportunities for and encourages leadership, if applicable

Autonomy supportive
- Acknowledges negative affect and feedback non-defensively, and is able to explore the issue to reach more constructive expression
- Points out the rationale value of an activity, rule or request
- Provides meaningful choices
- Emphasises and encourages intrinsic interest in activity
- Provides opportunity for input and initiative

Relatedness supportive
- Communicates of warmth, friendliness and acceptance
- Shows care and concern for participants
- Engages in informal, non-session focussed conversation
- Displays enthusiasm, energy, and use of humour
- Apparent level of comfort of facilitator

Engagement & communication
- Encourages participation in activities and discussion, attempts to include all members of the group
- Asks open questions
- Adopts appropriate language and style of communication, adjusting content or style of communication to help understanding if applicable

Structure & group management
- Maintains general order; redirects negative behaviour or extended unrelated discussion
- Reinforces group rules when necessary, in a non-confrontational manner
- Gives clear instructions and guidance for activities
- If discussion drifts for extended period, is able to redirect conversation or behaviour back toward session objectives
- Ensures session materials are organised and readily available
- Arrives on time

Fig. 2. MST4Life™ CARES Delivery Model.

that outdoor adventure programs provide an effective context for PYD and learning through experience (Norton & Watt, 2014; Parry, Thompson., Holland, & Cumming, 2021). By providing young people with the opportunity to leave their normal urban environment and participating in physical activities that offer incremental challenges (e. g., overcoming a fear of heights), Phase 2 provides them with new ways of building self-efficacy, autonomy, and authentic relationships with adults and peers as a form of social support networking (Cooley et al. 2015; Norton & Watt, 2014). Typical activities include high ropes challenge, mountaineering, and canoeing trips, led by qualified outdoor instructors, and the necessary safety equipment is provided by the outdoor adventure center. MST4Life™ facilitators continue to support young people during the trip to use different mental skills during the activities and in their reflections. The outdoor phase was specifically designed to provide opportunities for young people to transfer and further develop the mental skills developed in the first phase (Cooley et al., 2015; Parry et al., 2021). In support of the CARES model, Parry et al. (2021) found that meeting young people's psychological needs and the resulting wellbeing improvements in Phase 1 served as a catalyst for increasing young people's intrinsic motivation. In turn, this increased

intrinsic motivation facilitated the transfer and further development of their mental skills within Phase 2.

3.3.5. Item 5: Expertise and Background of Program Facilitators

For the feasibility and pilot work (2014) and first three years of the main program delivery (2015–2017), a facilitator led Phase 1 sessions and was supported by a co-facilitator. The facilitators and co-facilitators all had a background in psychology with 4/5 currently enrolled or had completed a PhD in Sport Psychology. The delivery team were supervised by a Chartered Sport and Exercise Psychologist and received reflective practice sessions with a Clinical Psychologist. Housing Service staff (i.e., support workers and LSW coaches) attended sessions, contributed to discussions, helped to manage challenging behaviors, and supported engagement of young people. Trained outdoor education instructors led activities and guided reflections in Phase 2 in collaboration with the MST4Life™ facilitators and Housing Service staff.

As part of sustainability and capacity building plans in the final 3 years of the program (2018–2020), LSW coaches received 3 days of training on delivering the program and support workers received 1 day of training to champion the program with future young people. These

Table 1
MST4Life™ Program Content and Learning Objectives.

Week	Name	~Duration	Learning objectives (by the end of the session, the young person will:
1	Introduction & ice breaker	2 h	• Have an understanding of what mental skills are. • Be aware of what MST4Life™ involves. • Be more familiar with the facilitators and other group members. • Feel a sense of belonging, ownership and excitement towards the program they are about to begin.
2	Future selves	2 h	• Identify positive long-term goals and values • Tell themselves hopeful and optimistic messages
3	Strengths profile	2 h	• Identify their character strengths • Discuss how they could use their character strengths to achieve their goals • Understand how MST4Life™ can be tailored to develop their personal assets
4	City Safari	4 h	• Discuss the important characteristics of teamwork • Navigate around Birmingham and historical landmarks • Connect with the present moment and what is around them
5	Dream team	2 h	• Discuss the important roles and strengths required in a well functioning support network • Identify who is in their support network • Reflect on how they would use their support network in different challenging situations • Understand how support networks change over time
6	Cake sale planning	2 h	• Discuss the important roles required in a small business • Organize an event, including budgeting, role allocation, time management etc. • Set achievable goals and use planning tools to help stick to them
7	Cake sale	4 h	• Engage with members of the public effectively • Work effectively in a team • Carry out an action plan
8	Air vehicle challenge	2 h	• Work creatively in a team to a strict time limit • Engage in healthy competition
9	Emotional awareness	2 h	• Identify and discuss the range of emotions • Categorize emotions according to the helpful/unhelpful, low/high intensity grid • Reflect on the experience of, triggers for, and responses to different emotions • Be accepting of different emotional experiences
10		2 h	

Table 1 (*continued*)

Week	Name	~Duration	Learning objectives (by the end of the session, the young person will:
	Building life skills portfolio & preparation for outdoor residential trip (Phase 2)		• Identify and discuss the mental techniques and skills used in each session over the 10 weeks • Recognize and discuss their achievements over the past 10 weeks • Identify their personal strengths and how they can apply them on the residential

training sessions covered the principles of strengths-based approaches and MST, the CARES delivery model, session outlines and activities, and how to lead guided reflection discussions. LSW coaches initially co-facilitated sessions and then transitioned into the facilitator roles so that the MST4Life™ program is now 100% delivered by Housing Service staff.

3.3.6. Items 6 and 8: How, When and How Much

MST4Life™ consists of: (a) separate pre-program meetings with young people and staff from the "host" supported accommodation site (1 h each); (b) the 10 community-based sessions in phase 1 (1.5–4 h/session); (c) meeting with staff between phase 1 and phase 2 (1 h); (d) the 4-day/3-night residential trip to an outdoor adventure center; and (e) separate post-program follow-up meetings and debrief for young people and staff from the host site 2–3 months after program ends. All meetings and sessions are conducted face-to-face in groups.

3.3.7. Item 7: Location(s) Where the Intervention Occurred, including Necessary Infrastructure or Relevant Features

Pre- and post-program meetings and most sessions in Phase 1 take place within a training room or communal area of supported accommodation sites of the Service based in the West Midlands, UK. Certain sessions take place within the local community such as the civic library and University campus. The outdoor education center used in Phase 2 is located in the Lake District, Cumbria of the UK.

3.3.8. Item 9: Tailoring (What, Why, When, and How)

A modification made following the feasibility study (Cumming et al., 2021) based on feedback from staff was to provide groups with the choice of having Phase 1 delivered as 10 weekly sessions or 2 x week for 5 weeks. This change enabled program delivery to be extended to short-stay accommodation sites within the Service.

3.3.9. Items 10 and 12: Modifications, Adherence, and Fidelity

The results of the initial stakeholder consultation informed the need for MST4Life™ to be an adaptable program. To balance flexibility with consistency, the program focused on having a standardized approach to delivery and core session activities (e.g., rapport building, guided reflections) with a bank of icebreakers and sessions activities to promote targeted mental skills that were selected based on young people's input and circumstances, as well as practicalities, such as the group size, location, and weather conditions.

In the first 3 years of the program (2014–2017), fidelity assessment mainly focused on delivery (e.g., number of sessions delivered) and uptake. The latter was assessed using attendance registers and facilitators' ratings of young people's engagement in sessions, defined as involvement in session activities on a possible scale ranging from 1 (*not at all engaged*) to 10 (*fully engaged*). Engagement was considered to be time spent on on-task (e.g., contributing to group discussions), pro-social behaviors (e.g., helping out another person), and refraining from disruptive behaviors (e.g., displaying aggression towards another

person). Other sources of fidelity data included completing the Interest/Enjoyment subscale of the Intrinsic Motivation Inventory (IMI; Ryan, 1982), post-program focus groups, and program facilitator diaries completed after each session. This data (based on $N = 195$) indicated that participants attend on average 5.43/10 sessions in Phase 1 of the program, and 43% go onto attend the outdoor education residential in Phase 2. Engagement in sessions tended to be high, with mean facilitator ratings of 8.24 ($SD = 1.16$). The average score on Interest/Enjoyment subscale was 4.34 ($n = 75$; $SD = 0.82$), based on a scale ranging from 1 (*not true at all*) to 5 (*very true*).

In addition to these measures, a more rigorous approach was developed, pilot tested, and implemented in the following three years (2017–2020) as the program moved into its capacity building and sustainability phase. Self-reflections of the delivery team were supplemented with real-time observations by trained evaluators not involved with program delivery to provide a rigorous and holistic assessment of fidelity (Tidmarsh, Whiting, Thompson, & Cumming, 2021). Based on the program's CARES model, a rating scale tool was iteratively developed and consisted of 27 items to assess the extent facilitators were observed as displaying/perceived themselves to having displayed need supportive or need thwarting behaviors. This enhanced fidelity assessment was implemented in a mixed-methods study involving three waves of program delivery between April, 2018 and June, 2019 (Tidmarsh et al., 2021). Overall, MST4Life™ was found to have been delivered with high fidelity across a range of facilitators (i.e., high levels of needs supportive behaviors and low levels of needs thwarting behaviors). University staff with a psychology background and greater experience in delivering the program adhered more to the desired delivery style than frontline staff from the Service who had a mixture of backgrounds and educational levels, as well as less experience in delivering the program. Facilitators experienced challenges and enablers to delivering this intervention with fidelity, including high support needs, language barriers, drug use of participants, and challenges related to the context in which the program is delivered, such as communication with staff and availability of training spaces.

3.3.10. Item 11: Strategies to Improve and Maintain Fidelity

To maintain and improve fidelity, all MST4Life™ facilitators receive training, the training manual, and program materials (see TIDieR items 3 and 5) prior to a program. During the program, they complete the self-reported checklist and engage in regular peer debriefs. Aligned with the Housing Service's psychologically-informed environment (Keats et al., 2012) as well as recommendations for applying strengths-based practice with service users (Guo & Tsui, 2010), facilitators are encouraged to reflect-in-action by consciously thinking about what they are doing while they are doing it (Schön, 1983). This type of reflection enables facilitators to respond to unexpected situations during a session (e.g., a young person disclosing to the group that their partner is newly pregnant) by drawing on their knowledge of the CARES model and then applying it to new experiences. After sessions, facilitators are encouraged to reflect-on-action by critically looking back on their delivery experiences, analyze and interpret what happened, speculate how it could be handled differently, and consider if changes are needed in future (Burns & Bulman, 2000; Schön, 1983). Feedback from real-time observations is also provided in 1:1 sessions with facilitators and review meetings after a program has been delivered. Booster sessions are provided by the research team to review and build on the initial training.

4. Discussion

The aim of this paper was to use the TIDieR checklist to describe the rationale, logic model, and content of the MST4Life™ program, a multi-faceted strengths-based psychoeducational intervention for improving wellbeing and social inclusion of young people experiencing homelessness or at risk. The developmental process of a novel complex intervention is rarely reported, but important for understanding the rationale

and aims along with providing enough details to enable replication with fidelity and future scaling up and out (Hoddinott, 2015). Using the TIDieR checklist to frame the description of MST4Life™ in the present paper helped to ensure more complete and consistent reporting of this intervention. Reflecting on the rationale, logic model, and content of the MST4Life™ program using this checklist has led us to identifying key lessons to share.

4.1. Lessons learned

1. **Sustaining long-term CBPR partnerships**: An important feature of MST4Life™ is the long-term CBPR partnership (> 8 years) involved in its development, delivery, and evaluation. As identified in a systematic review by (Brush et al., 2019), this collaboration reflected characteristics associated with successful long-term CBPR partnerships including high levels of commitment to the partnership, mutual respect for the unique skills, expertise, and perspectives provided by the different stakeholders, and building and maintaining trust. For example, young people helped to write and film recruitment videos whereas frontline staff provided suggestions for a revised program name. Early on, the program was named "Mental Skills Training for Life". While young people and staff like the acronym MST4Life™, they were concerned that the word "mental" carried negative connotations and put some young people off from joining the program. Young people and staff voted and the most popular alternative was My Strengths Training for Life™. These examples help to illustrate how stakeholders were involved as active and equal partners in all phases of the program, not just at its inception (Fletcher, Hibbert, Hammer, & Ladouceur, 2017). Through multiple action research cycles, this partnership facilitated changes and improvements to MST4Life™ to ensure its ongoing acceptability and likelihood of long-term implementation beyond the life of the project. Preparing for sustainability, such as by planning to engage in action research cycles, is an important initial step in program development (Roberts et al., 2013; Schoonover et al., 2019). Sustainability plans were therefore inbuilt from the outset, with key project activities including the development, pilot testing, and larger roll out of training and resources for frontline staff to independently deliver the program.

2. **The need for an iterative and fluid logic model**: The theoretical underpinnings, initial needs analysis, and feasibility study (Cumming et al., 2021) informed the development of the MST4Life™ logic model. A logic model serves as an overarching guide to program implementation without being overly rigid and prescriptive (Fielden et al., 2007). This enables flexibility so that partnership programs such as MST4Life™ can last in the long-term and withstand context changes (e.g., staff turnover, changes in priority). Indeed, Fielden et al. (2007) recommend that logic models are revised to ensure that they continue to meet the needs/goals of community members. Following this recommendation ensured MST4Life™ could address changing priorities for the Service. Initially, the program was intended for accommodation sites that provided longer-term accommodation stays (e.g., 6–12 months). To fill gaps in support provision, the Service was also keen to test whether the program could be offered in shorter-stay accommodation sites (e.g., 30 days) as well as for young people housed within community settings and receiving floating support (i.e., a form of community outreach). Because MST4Life™ was designed with a flexible delivery model, we were able to adjust to meet changing needs and priorities of the Service over time. Having open communication between project partners about who the program was intended for and how it is linked to other services/programs offered by the housing service also helped to ensure MST4Life™ led to unexpected opportunities, such as participation in the program counting towards the Services' accredited life skills training award. Viewing logic models as iterative and fluid, rather than fixed, can therefore be another contributing factor to

program sustainability within community-based partnerships (Brush et al., 2019; Fielden et al., 2007).

3. **Ongoing needs assessment**: Our initial needs assessments informed us that MST4Life™ would need to be accessible, acceptable, and flexible to meet the needs of a complex and heterogenous group. Common support needs amongst young people experiencing homelessness are being NEET, having co-occurring mental health difficulties, learning and/or developmental disabilities, and being pregnant and/or having caring responsibilities for young children (Homeless Link, 2018). It also helped us to better understand what specific challenges young people are facing in the context in which the program was being delivered (e.g., pressures of the UK benefits system). Although these needs and challenges identified in the initial formative work remained relevant throughout the project, a key lesson was to view needs assessment as an ongoing process. Working in partnership with young people, frontline staff, and organizational leaders enabled us to continually ensure that MST4Life™ is suitable for a wide range of support needs. We included a brief needs assessment for each wave of program delivery, which involved consulting about the specific needs and interests of a particular group as well as gaining their views on any anticipated barriers and enablers to engagement. For example, staff helped emphasize that young people found it easier to engage with the program in the summer months when there were fewer competing activities.

4. **Having different ways to involve and communicate with stakeholders**: Similar to Nichols (2002), we found it worked well to have different ways to involve stakeholders in the planning, delivery, and evaluation of MST4Life™. This included both formal (e.g., presentations to board meetings, focus group discussions) and informal (e.g., impromptu discussions such as when making the coach journey to and from the outdoor adventure center, phone calls, email exchanges) methods. High levels of participation via regular meetings and bidirectional communication was also identified by Brush et al., 2019 as contributing to successful long-standing CBPR partnerships.

5. **The need for reflective practice**: MST4Life™ is a strengths-based program that is occurring against a backdrop of larger structural action to reduce inequalities and powerlessness in young people experiencing homelessness, including the implementation of psychologically-informed environments to design/remodel housing services to reduce rates of eviction and abandonment (Keats et al., 2012). A psychologically-informed environment helps housing service staff to better understand the root causes of challenging emotions and behavioral problems (e.g., traumatic and abusive childhoods) and work more creatively and constructively with service users as opposed to imposing strict rules and penalties for non-compliance. Within a strengths-based approach, this might be recognizing that young people's strengths include strategies for survival, resistance, and rebellion (Guo & Tsui, 2010). Reflective practice is considered to be a key strategy for implementing a psychologically-informed environment by: (a) enabling service users to feel heard and their problems recognized; (b) giving staff perspective on their own emotional challenges of doing this work; and (c) helping to develop learning cycles and skills development, with staff learning from and supporting each other (Keats et al., 2012). Within MST4Life™, reflective practice also supports the fidelity with which the program is delivered as intended (i.e., aligned with the CARES model).

5. Conclusions

In conclusion, the TIDieR checklist is a useful framework for systematically describing MST4Life™ so that it can be replicated with fidelity by others. This paper makes an original contribution by using CBPR to develop, and TIDieR to describe, a multi-faceted strengths-based intervention for promoting the mental skills of young people experiencing homelessness based on approaches more commonly used in sport. By providing a detailed overview and outlining our lessons learned, policy makers, commissioners, program planners, and researchers will be better able to replicate MST4Life™ or other strengths-based psychoeducational programs for young people experiencing homelessness or at risk.

CRediT authorship contribution statement

Jennifer Cumming: Conceptualization, Funding acquisition, Methodology, Writing – original draft. **Richard Whiting:** Investigation, Writing – original draft, Writing – review & editing, Project administration. **Benjamin J. Parry:** Conceptualization, Investigation, Writing – review & editing, Validation. **Fiona J. Clarke:** Writing – original draft, Writing – review & editing. **Mark J.G. Holland:** Conceptualization, Investigation, Writing – review & editing. **Sam J. Cooley:** Conceptualization, Methodology, Formal analysis, Investigation, Writing – review & editing, Project administration. **Mary L. Quinton:** Validation, Investigation, Writing – review & editing, Project administration.

Appendix 1

Case study of Aaron

At the start of the MST4Life™ program, Aaron (a pseudonym) was uncomfortable with the group setting. Despite being well-mannered and friendly, throughout the early sessions he had an underlying sense of tension about being in a large group, conveyed through his reserved demeanor and minimal contribution to group discussions. Following an informal interview with Aaron's support worker during the program, the facilitators began to get a better understanding of why Aaron seemed particularly withdrawn in the early sessions. Aaron's support worker described his family relationships as "strained"; depicting a severely fragmented relationship with his mother and father, as well as complex issues surrounding the guardianship of his own son. Presenting to the Housing Service as street homeless, Aaron had previously struggled to maintain his tenancy in shared accommodation, often getting agitated and distressed around other people. Additionally, the support worker explained that Aaron daily used illegal substances.

Aaron's support worker admitted it was initially a struggle to get him to attend the MST4Life™ program. However, Aaron went on to attend 7 of

the 10 sessions in Phase 1 and most of the residential trip to the Lake District (2 of the 3 days) in Phase 2. His engagement continued to increase throughout the program by completing the activities in the sessions, working well with other members of the groups, and taking part in an interactive diary room. When reflecting on the program in week 8, Aaron described his greatest achievement:

> Before I come on the course… I didn't like to be around people because I get that angry and being around people was not worth the stress, because I'll either be angry and it's just, I couldn't be round people and I was just really locked off from everyone. And even though its once a week it's still a bit of socializing a feeling normal, isn't it? So, I like that.

Additionally, when asked how the program might have affected his day-to-day life, Aaron replied by saying:

> I'm doing more positive things because I'm putting myself round more positive people. When I first come on the course, I was chilling with old mates, still doing good but still chilling round the wrong people, whereas now… I'm still socializing and I'm not chilling round bad people. So, I've bettered myself in a way.

Aaron's support workers saw positive changes in him too. One support worker reflected on the impact of mixing with, who Aaron considered to be 'normal' young people, from a sporting context, helping change Aaron's reflection of his own lifestyle habits:

> Aaron's goal is to communicate and mix with normal people, and normal people do not do drugs in that size. So, particularly when he was with those young people from the cricket club, that's normal people and that would have been another incentive for him to continue to reduce [use of illegal drug].

The same support worker even noted that Aaron had significantly reduced his use of drugs from 3 g a day to 1 g a day during the latter stages of the MST4Life™ program. Approximately 3 months after completing the program, Aaron's new support worker also reported seeing positive reductions in his use of the substance and explained that Aaron was now engaging with a drug agency for additional support.

When Aaron started the MST4Life program he was not in education, employment, or training. Following MST4Life™, his support worker reported that Aaron wanted to pursue a job in social support and was attending training to acquire the necessary qualifications.

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