

# Positive Youth Development Service-Learning Opportunity for University Students

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## Abstract

South African university students ( $n = 18$ ; aged 21–28) participated in the LifeMatters train-the-trainer (TTT) workshop. Ten trained participants ( $n = 10$ ; aged 21–23) then implemented the program as youth facilitators at three local schools. The study aimed to describe changes in participants resulting from the TTT and implementation experience. Mixed-methods data were collected via self-report survey instruments (ascertaining self-efficacy, self-esteem, and personal growth), training program experiential review forms, and postimplementation focus groups. Survey data were collected pre-TTT, post-TTT, postimplementation, and follow-up (one month after TTT for nonimplementers). Participants reported improvement in self-efficacy, self-esteem, and personal growth following completion of the TTT workshop and further improvements after the implementation experience. The LifeMatters TTT workshop and implementation experience promoted participants' positive youth development (PYD) factors, personal and professional development, and acquisition of mental skills. Implications of providing students with PYD training and supervised service-learning opportunities are discussed.

*Keywords: psychological skills, life skills, emerging adults, college students, experiential learning*



**P**ositive youth development (PYD) is a strength-based approach to promoting positive changes in youth (Lerner et al., 2011, 2021). Capacity-building PYD training and education (Balva et al., 2022; Dvorsky et al., 2019; Li & Shek, 2019) provide for (a) improved PYD indicators/factors, (b) skill building (e.g., mental skills), and (c) personal and professional development. PYD programs aim to foster assets and competencies and improve PYD outcome factors, including self-efficacy, self-esteem, and personal growth (Catalano et al., 2019; Chen et al., 2001; Robitschek et al., 2012; Rosenberg, 1989). There is a gap in the literature regarding PYD training and supervised PYD service-learning/experiential learning opportunities for emerging adults (18–29 years) in higher education, particularly in South Africa and other low- and middle-income countries (Alvarado et al., 2017; Catalano et al., 2019; Dvorsky et al., 2019). South African universities have an es-

sential role in fostering student engagement in educational opportunities that foster the skills and agency necessary for student development and social change (Bantjes et al., 2019; De Jager-van Straaten et al., 2016; Favish et al., 2012; Garton & Wawrzynski, 2021).

One potential opportunity is LifeMatters, a manualized evidence-based PYD program (Hanrahan, 2017) combining elements of sport psychology and cognitive behavioral theory (CBT), grounded in PYD (Lerner et al., 2011, 2021) and self-determination theory (Ryan & Deci, 2000). The program consists of 10 sessions, each session involving a synergistic mixture of physically active games, discussions, worksheets, and a thought-provoking prosocial quote. A detailed breakdown of each session has been published previously, including the mental skills taught and required materials/resources (Hanrahan, 2012; Page et al., 2022; Serra de Queiroz, 2017). The LifeMatters

train-the-trainer (TTT) workshop prepares participants to facilitate/implement the 10-session program with youth groups. The LifeMatters TTT workshop has complementary elements that contribute to PYD factors, such as self-efficacy, self-esteem, and personal growth. Elements include (a) CBT and mental skills training methodologies (Hanrahan, 2017; Niveau et al., 2021), (b) a PYD climate (Holt et al., 2020), and (c) promotion of self-determination (Ryan & Deci, 2000). For example, prosocial values are taught explicitly via thought-provoking prosocial quotes and discussions (Hanrahan, 2012; Serra de Queiroz, 2017) and implicitly through fostering a PYD climate (Holt et al., 2020). Botswana sports coaches who completed LifeMatters TTT reported learning mental skills, professional development, and increased PYD factors; participants felt the TTT positively influenced their lives and, as a result, believed the program should be taught throughout Botswana (Hanrahan & Tshube, 2016, 2018).

University students who know and use mental skills (e.g., goal-setting, mental imagery, and relaxation) are better equipped psychologically to persevere at university and report higher self-efficacy, self-esteem, and self-worth (Conway et al., 2016; Rivers et al., 2013). Self-efficacy positively affects students' motivation to learn, resilience, persistence at university, goal-setting, civic learning experiences, and happiness (Baier et al., 2016; Richards & Levesque-Bristol, 2016; van Zyl & Dhurup, 2018). Self-esteem is a key psychological factor in predicting university students' learning performance and academic achievement (Arbabisarjou et al., 2016). Personal growth plays a vital role in university students' subjective well-being, ability to embrace change, learning in proactive ways, and developing self-evaluations congruent with self-identity (De Jager-van Straaten et al., 2016; Freitas et al., 2016; Mason, 2019).

Supervised facilitation opportunities (e.g., LifeMatters implementation) involving experiential learning may provide university students with an enhanced educational experience (Favish et al., 2012; Maran et al., 2019). Potential improvements include reinforcing learning (i.e., TTT workshop knowledge), increased autonomy (initiative-taking and accountability), personal development, professional development, and skills development (e.g., interpersonal skills, problem-solving and time management;

Naudé, 2015; Richards & Levesque-Bristol, 2016; Ryan & Deci, 2000; Young, 2017). Quality service-learning opportunities for university students contribute to enhanced self-efficacy (Allen et al., 2021), self-confidence (Nickols et al., 2013), and personal growth (Ti et al., 2021). Experiential learning and service-learning can be empowering (Chan et al., 2016), enhance students' civic learning (Ti et al., 2021), and develop students' intercultural competencies (Nickols et al., 2013). Community engagement challenges students by providing novel situations and experiences (Houshmand et al., 2014), increasing their capacity to deal with a complex and unpredictable world (Naudé, 2015). Therefore, South African university students who take on opportunities to learn an evidence-based PYD intervention (e.g., LifeMatters TTT workshop), then facilitate/implement the program under supervision, may garner several benefits and positive outcomes. Psychology and sports science university students were selected for the study because they may gain several overlapping developmental and educational benefits from a TTT workshop and service-learning experience (Chan et al., 2016; Chiva-Bartoll et al., 2018; Ruiz-Montero et al., 2023; Valdez & Lovell, 2022).

The first aim of this study was to describe changes in university students' self-efficacy, self-confidence, and personal growth during several intervals: (a) pre-TTT to post-TTT (TTT workshop experience); (b) post-TTT to postimplementation (implementation experience); (c) pre-TTT to postimplementation (combined TTT and implementation experience); (d) post-TTT to 1-month follow-up (follow-up for participants who did not implement the program). The study's second aim was to explore the students' perceptions and experiences about the LifeMatters TTT workshop, implementation experience, and general impressions of the program, as well as any potential personal and professional development.

## Method

### Participants and Procedure

University students (undergraduate and honors level) in the psychology and sports science departments were invited to participate in the LifeMatters TTT workshop and implementation experience via a recruitment presentation. Interested students were then provided with detailed par-

ticipant information and informed consent documents. Psychology and sports science students were targeted because knowledge of an evidence-based psychology program and practical experience are supplementary to their education and congruent with their vocational interests. Eighteen ( $n = 18$ ; 15 female) participants were trained, and 10 ( $n = 10$ ; 9 female) participants facilitated implementation of the program.

The TTT took place in August 2019 over a long weekend and consisted of 20 hours of interactive learning. The location was inside a gymnasium at a university in the Western Cape, South Africa. Participants received a certificate for completing the TTT workshop.

Two weeks after the TTT, some participants implemented LifeMatters as facilitators. Facilitators worked together in groups of two or three and were supervised by the first author while implementing LifeMatters. Implementation occurred at three schools (across four groups) in low-income urban neighborhoods. Two schools were in a low-resource community outside Stellenbosch; adolescent participants (adolescent learners) were 13–19 years of age, Black South African (100%), and first language isiXhosa (92.9%) speakers (Page et al., 2023). The third school, which caters to children and adolescents with disabilities and chronic health conditions, was in the City of Cape Town; adolescent learners were 13–17 years of age, Black South African (100%), and first language Afrikaans (40%), English (40%), and isiXhosa (20%) speakers (Page et al., 2022).

### Study Design

Quantitative data assessments (survey instruments) measuring participants' self-reported self-efficacy, self-esteem, and personal growth were conducted at three time points: before the TTT workshop (T1; pre-TTT), after completing the TTT workshop (T2; post-TTT), and after participants implemented the program (T3; postimplementation) or follow-up (one month after TTT for nonimplementers). Comparisons between participants' aggregated scale scores at the three time points were analyzed.

Qualitative data were collected from participants via written training program review forms completed after the TTT workshop (T2; post-TTT) and focus groups performed after implementation (T3; postimplementation).

## Survey Instruments

### Demographic Information

Prior to the TTT workshop (T1), participants reported their demographic information, including age, gender, population group, first language, area of study (i.e., psychology or sports science), and level of study (undergraduate or postgraduate).

### New General Self-Efficacy Scale

The New General Self-Efficacy scale (NGSE) measures an individual's capacity to adapt effectively to novel and adverse environments and captures their tendency to view themselves as possessing a general sense of mastery (Chen et al., 2001). The NGSE contains eight items, scored on a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Mean scores were calculated, with higher scores reflecting greater positive self-evaluations. The NGSE has adequate reliability (0.88 to .90) and validity (Chen et al., 2001; van Zyl & Dhurup, 2018).

### Rosenberg Self-Esteem Scale

Self-esteem is the positive and negative feelings a person has about themselves. The Rosenberg Self-Esteem Scale (RSES) contains 10 items, scored on a 4-point Likert-type scale from 1 (*strongly disagree*) to 4 (*strongly agree*). Five items are positively worded, and five are negatively worded in an attempt to inhibit response bias. Mean scores were calculated, with higher scores reflecting greater positive self-evaluations. The RSES has adequate reliability (0.76 to 0.86) and validity among racially diverse samples (Makhubela & Mashegoane, 2017; Rosenberg, 1989).

### Personal Growth Initiative Scale–II

The Personal Growth Initiative Scale–II (PGIS–II) is a multidimensional instrument of the behavioral and cognitive components of personal growth and indicates a person's tendency toward pursuing and capitalizing on opportunities for self-improvement (Robitschek et al., 2012; Sanders et al., 2016). The PGIS–II has 16 items, scored on a 6-point Likert-type scale from 0 (*disagree strongly*) to 5 (*agree strongly*). Mean scores were calculated, with higher scores reflecting greater positive self-evaluations. The PGIS–II has adequate reliability (.78 to .93) and validity (Çankaya et al., 2017; Robitschek et al., 2012).

## Qualitative Data Collection

The review form for the training program contained questions that sought participants' opinions about various aspects of the program, such as their likes and dislikes, along with inquiries about the content they learned and were likely to remember and apply in the future. The experiential review form has been helpful for program evaluation and improvement in prior LifeMatters studies (Hanrahan, 2017; Page et al., 2022, 2023).

Three focus groups were conducted with participants ( $n = 16$ ; five to six participants per group). A semistructured interview schedule included questions about experiences of the TTT, experiences implementing the program, personal and professional development, evaluation of the program, and the program's suitability to the South African context.

## Data Analysis

Survey instrument data were analyzed in IBM SPSS (Version 27). Internal consistency of the surveys was assessed using Cronbach's alpha scores and found appropriate (range 0.70–0.94). Descriptive statistics were used to summarize participant demographics and primary outcomes. Following Kim's (2013) guidelines, normality was assessed using converted  $z$  scores (for small samples). Normally distributed data were analyzed by paired sample  $t$ -tests and nonnormally distributed data by Wilcoxon signed-ranks tests. Hedges's  $g$  was used to correct for bias of overestimating population effect size (Cumming & Calin-Jageman, 2016). Training evaluation form findings are reported. Focus group data were analyzed using NVivo 12; thematic analysis was performed with themes identified inductively (Braun et al., 2016).

## Ethics

Ethical approval was obtained from University of Queensland (Clearance Number 2019001079) and the South African Medical Association Research Ethics Committee. Institutional permission was obtained from the local university and the Western Cape Education Department. Participants provided written informed consent.

## Results

### Demographic Information

Eighteen participants (15 female) aged 21–28 years ( $M_{\text{age}} = 22.22$  years;  $SD = 1.77$ )

attended all sessions and completed the TTT (see Table 1 for demographic information). Ten participants (nine female) aged 21–23 years ( $M_{\text{age}} = 21.6$  years;  $SD = .84$ ) facilitated LifeMatters.

### Changes in PYD Factors Following TTT Workshop and Implementation

Comparisons of participants' aggregated scale scores (mean or median) between the three time points (pre-TTT, post-TTT, and postimplementation or follow-up) are reported in Tables 2 and 3. Statistically significant findings are reported in the text.

#### Comparison of Pre-TTT ( $T_1$ ) to Post-TTT ( $T_2$ )

Mean scores were higher posttraining for all measures (i.e., self-efficacy [NGSE], self-esteem [RSES], and personal growth [PGIS-II; see Table 2]). Effect sizes (Hedges's  $g$ ) for the scales ranged from small to medium ( $g = 0.18$  to  $0.51$ ). A two-tailed paired samples  $t$ -test indicated a statistically significant improvement for NGSE,  $t(17) = -3.03$ ,  $p < .01$ .

#### Comparison of Post-TTT ( $T_2$ ) to Postimplementation ( $T_3$ )

Mean scores were higher postimplementation for NGSE and RSES (see Table 2). Effect sizes (Hedges's  $g$ ) for the scales were small ( $g = 0.13$  to  $0.14$ ). The median (50th percentile) score was higher in the expected direction postimplementation for PGIS-II (see Table 3). The effect size (Hedges's  $g$ ) for change on this scale was large ( $g = 0.75$ ).

#### Comparison of Pre-TTT ( $T_1$ ) to Postimplementation ( $T_3$ )

Mean scores were higher postimplementation for NGSE and PGIS-II (see Table 2). Effect sizes (Hedges's  $g$ ) for the scales ranged from small to large ( $g = 0.33$  to  $0.74$ ). The median (50th percentile) score was higher in the expected direction postimplementation for RSES (see Table 3). The effect size (Hedges's  $g$ ) for the scale was large ( $g = 1.40$ ). A Wilcoxon signed-rank test indicated the difference was statistically significant for RSES,  $T = 53.00$ ,  $Z = -2.64$ ,  $p = .01$ .

#### Comparison of Post-TTT ( $T_2$ ) to 1-month Follow-up ( $T_3$ ) for Participants Not Involved in Implementation

Mean scores at follow-up were unchanged for NGSE, and mean scores had decreased for RSES and PGIS-II (see Table 2). Effect sizes (Hedges's  $g$ ) for the scales ranged from zero to small ( $g = 0.16$ ).

**Table 1. Demographics of the Trained Sample (n = 18) and Implementation Subsample (n = 10)**

Baseline characteristic	Trained sample		Implementers	
	<i>n</i>	<i>SD</i> %	<i>n</i>	<i>SD</i> %
Age (Mean years)	22.22	1.77	21.6	0.84
Gender: Female	15	83.33	9	90
Population group				
Black South African	1	5.56	1	10
Colored <sup>*</sup>	1	5.56		
White	16	88.89	9	90
Area of study				
Psychology	13	72.22	9	90
Sport science	5	27.78	1	10
Level of study				
Undergraduate	12	66.67	9	90
Honors	6	33.33	1	10
Primary Language				
Afrikaans	3	16.67	1	10
English	13	72.22	7	70
isiXhosa	1	5.56	1	10
German	1	5.56	1	10

<sup>\*</sup> In South Africa, the term “colored” signifies a person of mixed race.

**Table 2. Paired Samples *t*-test Results of Participants**

Scale	Cronbach's alpha	<i>M1</i>	<i>SD1</i>	<i>M2</i>	<i>SD2</i>	<i>t</i>	<i>df</i>	<i>p</i>	Hedges's <i>g</i>
Comparison of pre-TTT (T1) to post-TTT (T2)									
NGSE	0.70	4.03	0.38	4.23	0.39	-3.03	17	0.01	0.51
RSES	0.89	3.04	0.50	3.14	0.50	-1.40	17	0.14	0.18
PGIS	0.91	3.93	0.59	4.11	0.61	-1.57	17	0.18	0.28
Comparison of post-TTT (T2) to postimplementation (T3)									
NGSE	0.81	4.29	0.35	4.35	0.49	-0.48	9	0.64	0.14
RSES	0.92	3.27	0.52	3.34	0.50	-1.77	9	0.11	0.13
Comparison of pre-TTT (T1) to postimplementation (T3)									
NGSE	0.84	4.00	0.41	4.35	0.49	-2.17	9	0.06	0.74
PGIS	0.92	3.90	0.63	4.15	0.82	-1.65	9	0.13	0.33
Comparison of post-TTT (T2) to 1-month follow-up (T3)									
NGSE	0.77	4.09	0.43	4.09	0.47	0.00	7	1.00	0.00
RSES	0.83	4.14	0.47	4.08	0.35	0.60	7	0.57	0.14
PGIS	0.84	2.96	0.44	2.90	0.25	0.52	7	0.62	0.16

*Note.* NGSE: New General Self-Efficacy scale; RSES: Rosenberg Self-Esteem Scale; PGIS: Personal Growth Initiative Scale-II; *M1*: Scale mean at Time Point 1; *M2*: Scale mean at Time Point 2.

**Table 3. Wilcoxon Signed-Ranks Test Results of Participants**

Scale	Cronbach's alpha	Mdn1	SD1	Mdn2	SD2	z	df	p	Hedges's g
Comparison of Post-TTT (T2) to Postimplementation (T3)									
PGIS	0.94	4.34	0.72	4.56	0.82	-1.64	9	0.10	0.75
Comparison of Pre-TTT (T1) to Postimplementation (T3)									
RSES	0.91	3.20	0.53	3.40	0.50	-2.64	9	0.01	1.40

Note. PGIS: Personal Growth Initiative Scale-II; RSES: Rosenberg Self-Esteem Scale; Mdn1: Scale median at Time Point 1; Mdn2: Scale median at Time Point 2.

### The Experience of LifeMatters: Training, Implementation, and Personal and Professional Development

#### *Train-the-Trainer (TTT) Workshop Experience*

**TTT With Fellow Students: Benefits of Teamwork.** All participants enjoyed the supportive, judgment-free atmosphere of the workshop, meeting new people, and working in groups. The interactive delivery format, the authentic and enthusiastic trainer, and the ethos of teamwork and cooperation helped participants feel comfortable, learn, and have fun. The activities requiring teamwork and socialization took participants out of their comfort zones and created links that developed into friendships. “You have at least one thing in common with every person you meet. All close friends were once strangers, it is okay to open up” (Participant 1). Through activities and discussions, participants opened up and discovered commonalities, which led to bonding and the unexpected formation of friendships within 2 days. The games and physical activities were enjoyed, particularly the more challenging activities requiring cooperation and trust.

**TTT Improvements: Recruitment, Duration, Practice, and the Manual.** Participants suggested that recruitment should better explain and convey the content and methods of the TTT workshop. Initially, participants had assumed that the program would entail traditional sporting activities (e.g., soccer) and that life skills would be transmitted vicariously through bonding. “The explanation in class was enough to, like, get me like, ‘okay, cool, I want to do this,’ but I thought we were gonna be playing, like, softball” (Participant 2). Further, participants suggested the training be spread over several days and additional time be provided to run through the training.

Conversely, participants felt that some sessions and activities could be shortened. The provided food and the snack breaks were appreciated and gave participants time to relax, refresh, and reflect between sessions. Receiving training outdoors when weather conditions permitted was suggested.

The workshop was regarded as contextually relevant. Participants were cognizant that training took place among English-speaking, university-educated young adults and were concerned that translating training to practice may be challenging. They assumed adolescent learners from low-resource schools may struggle to grasp content quickly due to their young age, poor literacy levels, and language differences. Participants who had issues with being touched disliked games that required physical proximity. Concern was raised that overweight and disabled individuals might not be able to participate in certain activities (e.g., a trust activity where participants are lifted off the ground by the group and swayed gently back and forth).

Three program manual improvements were suggested: (a) a session-by-session introduction and a summary overview highlighting how learning content (e.g., self-confidence) relates to specific development outcomes (e.g., self-esteem), (b) a checklist to tick off while progressing through the program, and (c) visual cues and pictures of different activities and games (e.g., versions of tag-based games) to assist content recall when facilitating sessions.

What would help, um, would be just having a picture taken on the day of the training, where for example, like, with the different tag games, like, with people standing like a flamingo. . . . Um, just that picture, I'd be like, “OH! Okay, yes! I know exactly which game we're talking

about!” . . . Just those visual cues I think would have been a lot more helpful: “Okay, yes. This is where we are. This is what we’re doing today.” (Participant 3)

Having practiced all the activities during the TTT, participants felt competent and prepared to implement the program. The certificate awarded after the TTT was appreciated because it validated participants’ efforts, acquisition of knowledge, and experience gained.

### *Implementation Experience*

**Learning on the Job and Facilitation Preferences.** Participants reported feeling shy and uncertain of themselves while facilitating the first few sessions. “Yeah, and I think especially at [school name], like we struggled, I know on the first day, I was like very, um, like, shy around the kids” (Participant 2). Occupying a position of authority while being relatable and approachable was challenging, mainly when adolescent learners’ discipline was poor. After a few sessions, participants felt confident, empowered, and self-assured; these attributes carried over into their lives after the program. Preparation and facilitation of sessions necessitated participants’ familiarization and engagement with the learning content, resulting in improved knowledge acquisition of the program’s lessons. “Yeah, being able to, like, teach it to someone else definitely, like, imprints it” (Participant 4).

The participants had differing experiences and perspectives regarding supervision by the first author, the implementation group size, and working alongside a cofacilitator. Supervision made some participants feel relaxed, comfortable, and supported, whereas others felt evaluated and nervous. Cofacilitators promoted participants’ confidence by providing support and a sense of security, and by being someone to turn to for assistance during times of uncertainty or when challenges arose. Some participants disliked having a cofacilitator because they felt less needed, which resulted in reduced interest and engagement. Participants reported learning teamwork, cooperation, and collaboration while working alongside their cofacilitators. Over time, participants learned their cofacilitators’ strengths, interpersonal styles, and teaching methods. Larger group sizes (approximately 20 youths) were considered fun due to their

high energy and level of responsibility. Smaller groups (approximately 10 youths) were liked because the discipline was better, enabling more intimacy and one-on-one time with adolescent learners.

**Time Management and Adhering to Program Activities.** Poor time management affected some participants’ implementation. “I think that sometimes we felt a bit rushed, like there was just so much to do and, like, almost teach them that, maybe it felt rushed because we had to explain ourselves, like, 10 times” (Participant 5). Participants occasionally omitted content they deemed less important (e.g., a detailed model of attention) to focus on and emphasize lessons they believed were more relevant and beneficial (e.g., goal setting). Participants pointed to the adolescent learners’ poor literacy, learning difficulties, language barriers, and the need for facilitators to repeat themselves as reasons for the time crunch. For a minority of participants, their university schedules did not synchronize with the implementation sites (schools), resulting in suboptimal/irregular implementation schedules. Due to irregular implementation affecting continuity, some participants felt they had not formed as close relationships with the adolescent learners as they had hoped. Overall the implementation was considered enjoyable, as evidenced by a participant who reminisced about the implementation experience:

The laughter that came from the sessions was just contagious. I found myself screaming just as much as the kids when we were playing the games. . . . It was almost like a little bubble that we existed in when the intervention was going on. It was like everything else just stopped and it, like, it wasn’t just a school. . . . It was like there was something going on, there was this containment of energy and it was amazing, yeah. (Participant 3)

**The South African Context.** Implementation opened participants’ eyes to the realities (limitations, challenges, and opportunities) of psychology intervention in South Africa. The participants felt empowered and proud to contribute to PYD in the local underserved communities. The sense of satisfaction from giving back to the community justified the participants’ time commitment.

I think also, like, we have helped them in, like, quite a special way, like teaching them new things, but also just helping them with their confidence too, and I think that's quite rewarding for me. (Participant 3)

Active involvement with adolescent learners from the local underserved community and greater familiarity with the challenges inherent in the local schools kickstarted a process of reflexivity for participants. Participants were grateful for the numerous opportunities during their lives, including their access to higher education. Prior to the study, the majority of the participants had limited exposure and experience meaningfully interacting with adolescent learners from underserved (low-resource and low-income) communities. Implementation raised participants' awareness of the systemic problems in the community and the adolescent learners' daily struggles; they were inspired by what the adolescent learners had achieved, given the lack of PYD opportunities.

I also think, like, working with people from a specific background and context, you realize how much you actually have and how different your lives are, and I think we also actually learned a lot from the [adolescent learners] and, like, you can appreciate how much they do to get to where they are. (Participant 6)

Relating and forming bonds with the adolescent learners came naturally for some participants. "I really enjoyed the way that we, like, got a chance to build a relationship with the children, or yeah, the kids along the way, and yeah, it was really amazing for me to see how they actually responded" (Participant 7). Implementation challenged participants' self-perceptions of their strengths and interpersonal capabilities. Furthermore, participants reframed how they viewed personal achievement and implementation success, unanimously considering implementation successful and a positive experience.

### *Personal and Professional Development*

**Improved PYD Factors and Mental Skills.** Participants' personal development included improved self-efficacy, self-esteem, and personal growth; notable improvements included self-confidence

(e.g., public speaking), emotion regulation, and interpersonal skills. Participants felt they had learned valuable lessons that could be used in everyday life and had developed greater insight into their emotions and competencies. Participants reported learning and improving in the following skills: breathing/relaxation techniques, communication, goal-setting and motivation, imagery, positive coping mechanisms, progressive muscular relaxation (PMR), self-affirmations, self-talk, teamwork, and thought stoppage. Participants spoke of improved sleep, stress management, and time management by using mental skills (e.g., PMR and breathing activities). "I do imagery quite a lot, um, and mindfulness every night I go to sleep, so I learned it before the course, but after, I went on and made a thing to actually implement in my own life" (Participant 8). A participant spoke of overcoming their fear of failure and hesitance in setting goals and reported progressing toward a long-term goal (a fun run). A participant used thought stoppage and breathing activities to interrupt negative cyclical thinking and reduce anxiety.

Like today, I had a, like, not anxiety attack, but just overwhelmed by a lot of things I had to do and, um, I just had to tell myself, "stop," like you literally just have to stop, take a deep breath and . . . I mean, that is something that LifeMatters taught us. (Participant 5)

Positive personal development was highlighted more specifically for some students. A first-generation student from a community in which the intervention was implemented spoke of the relevance and impact of the mental skills and prosocial quotes (life lessons) to themselves, their family, and first-generation students.

I also come from [low-resource community], so, like, the skills that I learned were very helpful for me, because to be honest with you, I had never heard some of those things we heard there [during TTT], I was telling my sister and my friend and, like, going through the goal-setting thing and she'd also never heard of it, so, um, she was very happy about it. . . . I didn't know about the breathing exercises. I didn't know about the "control the controllable" stuff. Like, my mom



doesn't know anything about this. I know, because coming from my family, like most of the friends I have, like, we are first-generation university people, like, you don't have anyone, um, back home to tell you, like, to coach you on how to cope in university. . . . Like, you feel like you're thrown in the deep end. (Participant 9)

#### **Prosocial Values and Growth Mindset.**

Prosocial values (e.g., trusting others and being nonjudgmental) and being mindful and intentional about fostering a positive mindset were reported. Focusing on the present and having a positive outlook on life were essential life lessons. The program's prosocial quotes were instrumental to participants' learning and self-reflection because participants related to them meaningfully. The positive affirmations written anonymously by peers were an exceptionally positive experience for participants; they reported taking home the supportive, uplifting comments as a keepsake. Participants reported increased self-motivation and positive thinking, in part due to the group discussions and prosocial quotes (e.g., "Nobody can make you feel inferior without your consent").

I remember after that [TTT], I've just had a more positive mindset. It really changed something. I'm not usually very good at adopting positive things into my life. It just opened my eyes again that it is very helpful to be more positive and that there is also a lot to be positive about. (Participant 10)

The TTT inspired further self-development; participants reported investigating resources (e.g., self-help books) to learn about the mind, the brain's functions, and additional mental skills. Agency and taking control of one's life and behaviors was an important life lesson. "I think for me it's the same with 'control the controllable.' . . . I feel like I have more control of my life and I know the stuff that I can control, I actually do control, like waking up early" (Participant 9).

**Relevance for University Students: Professional and Educational Development.** Primary motivations for involvement in the study were to learn about sport psychology, learn new skills, gain practical experi-

ence, accumulate practical hours toward a degree, CV building, and to make a positive impact; participants felt they had met these objectives. Participants regarded the TTT as relevant and beneficial for themselves, psychology and sports science students, and university students in general. "The content, I feel, is very important for university students" (Participant 11). The sport psychology skills and concepts were regarded as complementary to their education, explaining new psychological concepts and filling knowledge gaps in a novel and easy-to-digest format. The program was described as a bridge connecting psychology and sports science. Participants felt the LifeMatters training had broad appeal to students interested in psychology.

Nevertheless, concern was raised that students might not prioritize developmental and educational opportunities (e.g., LifeMatters) above studies, employment, and socializing. Incorporating LifeMatters into psychology and sports science degrees and making the program compulsory by other means were suggested to increase students' involvement. The learning content was considered a balanced mixture of practical and theoretical components. However, a participant suggested a more lecture- and theory-based teaching approach to increase the broad appeal of the program due to the perception that students may feel self-conscious or too cool to partake in physical activities and games properly.

**Rare Opportunity: Practical Psychology Training.** The participants relished the rare opportunity to gain practical psychological training and experience during their studies. Implementation relieved participants' frustrations caused by years of studying with few opportunities to learn practical skills and work with people.

Like, we don't have opportunities, really, to do anything that's beneficial to the community when we're still studying. I think that's one big problem that we have in general, is that you can't actually do a lot because you're not qualified and it takes, it's such a long process to get a qualification that certifies you to actually go and work in the community, so the whole program was really cool, because it was the first time that I could actually go do something about it and it was

actually really clear. . . . Yeah, it's actually going to do things that I know is going to make a difference. (Participant 12)

Mental skills that apply to athletes, the general public, and everyday life situations were considered remarkable for their practical utility and for humanizing the science in a down-to-earth manner. "Yeah, we learned how to apply what we know to, like, athletes to actually, like, the average day person, which is actually a bit nicer" (Participant 1). Participants reported using LifeMatters games that required no resources (e.g., tag-based games) in their professional lives when coaching children despite having access to fancy equipment. Participants expressed the desire to continue implementing the program in the future.

## Discussion

### Changes in PYD Factors Following TTT Workshop and Implementation

The LifeMatters TTT workshop and implementation experience improved the university student participants' self-efficacy, self-esteem, and personal growth. Due to the interconnected nature of self-efficacy, self-esteem, and personal growth (Çankaya et al., 2017; Chen et al., 2001; Freitas et al., 2016; Robitschek et al., 2012; Rosenberg, 1989), it is unsurprising that these PYD factors all improved together. Effect sizes (Hedges's *g*) for the TTT, implementation, and combined experience ranged from small to large for a psychological implementation study (Cumming & Calin-Jageman, 2016). The study was intended to inform practice, not for significance testing; therefore, statistically significant findings should not be overinterpreted.

Mental skill usage (Conway et al., 2016; Rivers et al., 2013) and service-learning opportunities (Allen et al., 2021; Nickols et al., 2013; Ti et al., 2021) have been linked to elevated self-efficacy, self-esteem, and personal growth, potentially partly explaining students' elevated PYD outcome factors. The TTT and implementation experience independently contributed toward elevated participant PYD factors; however, the combined benefits of the TTT workshop and implementation experience may be greater than the sum of their parts. It is not possible to ascertain the benefits/influence of the implementation experience in-

dependently, given that the TTT workshop is a prerequisite of implementation and the implementation occurred directly after the TTT workshop. Nevertheless, despite these limitations, findings illustrate the implementation experience offered benefits beyond the TTT. By comparison, the PYD factors of the participants who completed only the TTT remained fairly stable at follow-up (T3) one month after the TTT. The quantitative findings are in line with prior LifeMatters TTT studies from low-income settings (Hanrahan & Tshube, 2018) and expand PYD literature in Africa, specifically regarding university students.

### Personal and Professional Development

Qualitative findings corroborate and support the quantitative results, providing further insight into how the LifeMatters TTT workshop and implementation experiences contributed to students' development. The knowledge, skills, and competencies gained during the TTT workshop were enhanced and solidified during the hands-on learning of the implementation experience. As expected, the overall experience promoted participants' PYD factors (self-efficacy, self-esteem, and personal growth), acquisition of mental skills, and personal and professional development.

The elevated PYD outcome factors appear to be linked with other improvements reported by participants, including mental skill usage, perseverance, positive self-identity, and deeper introspection. These links and improvements align with other researchers' findings (Arbabisarjou et al., 2016; Baier et al., 2016; De Jager-van Straaten et al., 2016; Mason, 2019; Richards & Levesque-Bristol, 2016; van Zyl & Dhurup, 2018).

The LifeMatters CBT and mental skills training methods (Hanrahan, 2017) appear to have been successful, with numerous mental skills reportedly learned, improved, and adopted in various spheres of participants' lives. The assets and competencies (e.g., increased autonomy) gained and improved through real-life practical experiences will likely transfer to other areas of life and confer long-term positive change (Ryan & Deci, 2000; Young, 2017). Evidence of professional development and knowledge transfer was seen in participants who employed practical skills and LifeMatters content (e.g., physically active games) in their professional work lives. Personal growth and a growth mindset were indi-

cated by inspired participants who sought further self-improvement opportunities and resources (Robitschek et al., 2012; Sanders et al., 2016).

The community engagement during implementation challenged and empowered participants, improved intercultural competencies, and fostered a deeper sense of social/civic responsibility. These benefits were reflected in participants' desires to implement the program again. These findings align with other service-learning and community engagement research (Chan et al., 2016; Houshmand et al., 2014; Naudé, 2015; Nickols et al., 2013; Ti et al., 2021). Enhancing students' agency for self-development and social/civic change is foundational to PYD philosophy (Lerner et al., 2011, 2021); furthermore, promoting prosocial values and a sense of social responsibility is an important role that higher education institutions in South Africa should fulfill (Favish et al., 2012; Garton & Wawrzynski, 2021; Naudé, 2015).

The TTT workshop and implementation contributed to core components of PYD: improved mental skills (e.g., goal-setting), building participants' assets and competencies (i.e., interpersonal skills), and cultivating healthier norms (i.e., prosocial values); it also promoted agency (i.e., perseverance and positive self-identity) and contributions to civil society (Catalano et al., 2019; Lerner et al., 2011, 2021). Altogether, the improvements participants reported may serve as both promotive and protective factors, positioning students on a positive trajectory for success at university (Bantjes et al., 2019; Conway et al., 2016; Rivers et al., 2013). Thus the educational, capacity-building, and personal and professional development that university students gained from this experience should not be understated, as they may not get these benefits elsewhere.

### **Implications for Practice: TTT Workshops and Implementation Experiences**

The psychology and sports science university students in this study completed the LifeMatters TTT workshop and implemented/facilitated the intervention with groups of adolescents; the research focused on the adolescent samples is published elsewhere (see Page et al., 2022, 2023). The lessons learned from participants' evaluations and perceptions align with prior research involving the LifeMatters TTT workshop (Hanrahan & Tshube, 2018). The resulting

recommendations may be appropriate and helpful to researchers/practitioners who wish to establish, implement, or improve a similar program and implementation (service-learning) approach, particularly with university student groups.

Psychology and sports science students, by their own account, desire and are ideal candidates for group-based experiential and hands-on learning, particularly when these opportunities are supplementary to their education, congruent with their vocational interests, aligned with their key motivators, and offer learning content that covers topics of interest (e.g., psychological and mental skills). Students' motivations for participation included learning about sports psychology, gaining practical experience and skills, CV building, accumulating practical hours toward a degree, and positively influencing society. These motivators should be considered when designing and recruiting students into PYD training and developmental opportunities to inspire students to participate and overcome their apathy/reluctance for developmental opportunities. University students in South Africa and other developing nations rarely have access to PYD training opportunities in higher education (Alvarado et al., 2017; Catalano et al., 2019; Dvorsky et al., 2019). For the above-listed reasons, which align with other researchers' findings (Chan et al., 2016; Chiva-Bartoll et al., 2018; Ruiz-Montero et al., 2023; Valdez & Lovell, 2022), psychology and sport science university students greatly benefit from and thus jump at the opportunity to participate in a structured, manualized, and evidence-based TTT program/workshop with an accompanying supervised implementation experience.

Peer relationships/friendships organically grow from group-based TTT and implementation experiences that involve close proximity, shared experience, and trust and empathy games. Peer relationships/friendships are potential long-term assets for students. Strategically offering these learning and growth opportunities, for example, at the start of the academic year, may promote positive group cohesion and identity among a class/cluster of students.

The LifeMatters teaching approach (mix of theoretical and practical elements) received high praise from the students due to the engaging and fun activities, and easy-to-understand and thought-provoking content. The experiential learning ap-

proach is effective with university students (Shek, 2012), and thus a more lecture-based teaching style may be counterintuitive and counterproductive to achieving the positive outcomes of the present study. A TTT workshop should prepare facilitators for implementation by teaching culturally responsive principles and practices (Gliske et al., 2021; Hanrahan, 2011; Simpkins et al., 2016). To this end, facilitators should be taught how to foster a PYD climate, defined as an inclusive, supportive, and enabling environment (Hanrahan, 2012; Holt et al., 2020; Serra de Queiroz, 2017). TTT workshops with a PYD climate and group activities (especially involving teamwork) and discussions (small and big groups) create supportive opportunities for participants to practice interpersonal and social skills.

A well-developed program manual is a key material for training and an invaluable resource for facilitators to use during implementation. Facilitator manuals can be improved by including a session-by-session summary of key learning content and outcomes, progress checklists, and visual cues (e.g., images) of activities as reminders. Time management skills should be explicitly taught, because facilitators often struggle to keep time and pace when implementing programming.

Concerning planning and structuring implementation, facilitators benefited from and preferred working in pairs with a cofacilitator, with supervisory support available when needed to assist with in situ challenges as they occurred. TTT and implementation experiences take students out of their comfort zones; the novel and unfamiliar contexts and problems stimulate participants' active engagement and learning. Implementation experiences foster reflexivity and introspection concerning participants' privileges, personal competencies, and interpersonal styles. Structured written reflections incorporated into the TTT and implementation protocols could promote students' introspection (Chan et al., 2016; Houshmand et al., 2014; Nickols et al., 2013), potentially contributing to learning cultural competency, and promoting self-efficacy and personal growth (Sanders et al., 2016; Young, 2017).

University students may feel anxious facilitating programming with youth groups, notably if they differ in terms of demographics (e.g., ethnicity, language, culture, socioeconomic status) and if it is their first time

in a leadership/authority role. However, despite differences (both real and imagined), the student facilitators and the adolescent learners both reported meaningful bonds; additionally, the facilitators were deemed relatable and caring role models (Page et al., 2022, 2023). Given a TTT workshop training facilitators in PYD methods (Lerner et al., 2011, 2021), and with adequate support during implementation, students' cultural competence will develop rapidly, as well as their communication skills, self-confidence, and self-efficacy (Young, 2017).

### **Limitations and Future Research Directions**

In future research, follow-up after the TTT and the implementation would be valuable to ascertain long-term effects and stability of improvements. Future research should include a larger sample and a control group. A study limitation is that learnings may be case-limited to this particular type of program and approach to engagement; therefore, findings should be interpreted/considered within the greater context of similar applied research. Future research could include implementation science protocols and methods to assess possible decreases in the effectiveness of PYD and LifeMatters implemented with child and adolescent participants within an experiential learning context. Future research might also investigate the long-term impacts of TTT and its implementation on the community.

LifeMatters has shown the potential to be a much-needed addition to South African universities to provide psychology and sports science students with an evidence-based PYD education and service-learning opportunity. Future research could investigate the LifeMatters workshop adapted to be part of a credit-bearing PYD subject for university students. Additionally, integrating supervised service-learning (Favish et al., 2012; Maran et al., 2019) within institutions grounded in evidence-based psychology, such as programs like LifeMatters, warrants more in-depth research. It would be worthwhile to examine the influence of the LifeMatters PYD workshop across a range of higher education institutions, fields of study, and demographic groups.

### **Conclusion**

The LifeMatters TTT workshop and implementation experiences improved students' self-efficacy, self-esteem, and personal

growth. The TTT workshop was relevant and beneficial for the university students, contributed to their personal and professional development, and promoted knowledge and use of mental skills. Community engagement and experiential learning provided students with real-life practical experience and enhanced learning. Students (emerging adults) navigating the challenges of university life may find PYD programs such as LifeMatters valuable for promoting well-being and resilience. Hallmarks of a successful PYD program include building assets and competencies, fostering an enabling environment, increasing agency, and increasing contributions to civil society. The LifeMatters TTT and implementation experiences meet these criteria. The LifeMatters workshop and supervised implementation experience have merit for inclusion at institutions of higher education in South Africa and have particular value for psychology, sports science, and first-generation students.



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