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Can Explicit Instruction in Social and Emotional Learning Skills Benefit the Social-Emotional Development, Well-being, and Academic Achievement of Young Children?

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Abstract This study investigated the effect of a social and emotional learning skills curriculum, the *You Can Do It! Early Childhood Education Program* (YCDI), on the social-emotional development, well-being, and academic achievement of 99 preparatory and grade 1 students attending a Catholic school in Melbourne, Australia. One preparatory and one grade 1 class were randomly chosen to receive structured lessons in YCDI, delivered by their classroom teachers over a period of 10 weeks, while the remaining preparatory and grade 1 class served as the control group. The lessons were designed to teach young children confidence, persistence, organisation and emotional resilience. The educational program consisted of explicit, direct instruction lessons drawn from the YCDI Early Childhood Curriculum taught three times a week, supported by a variety of additional social and emotional teaching practices. The results indicated that YCDI had a statistically significant positive effect on levels of social-emotional competence and well-being for the preparatory and grade 1 students, a reduction in problem behaviours (externalising, internalising, and hyperactivity problems) for the grade 1 students, and an increase in reading achievement (decoding text) for the lower achieving grade 1 students. These findings are discussed with regard to

issues concerning the role of explicit instruction in social and emotional learning for the early years.

Keywords Social and emotional learning · Explicit instruction · Reading achievement · Well-being

Introduction

The development of social-emotional competence is an important foundation for young children's later success and well-being. The Center on the Social Emotional Foundations for Early Learning (CSEFEL) defines social-emotional development as the developing capacity of the child from birth through 5 years of age to form close and secure adult and peer relationships; experience, regulate, and express emotions in socially and culturally appropriate ways; and explore the environment and learn (Center on the Social Emotional Foundations for Early Learning 2008).

The Collaborative for Academic, Social and Emotional Learning (CASEL 2003) have outlined five core social and emotional competencies that are important foundations for young people's well-being: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making. Researchers and practitioners have described key social-emotional skills that young children need as they enter school, including self-confidence, the capacity to develop positive relationships with peers and adults, concentration and persistence on challenging tasks, an ability to effectively communicate emotions, an ability to listen to instructions and be attentive, and skills in solving social problems (Shonkoff and Philips 2000). The emergence of these social-emotional skills helps young children feel more confident and competent in developing

The social and emotional learning program used in this research is published by the Australian Scholarships Group (visit <http://www.youcandoit.com.au> or <http://www.youcandoiteducation.com>)

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relationships, building friendships, resolving conflicts, persisting when faced with challenges, coping with anger and frustrations, and managing emotions (Parlakian 2003). The National Academy of Sciences reported that 60% of children enter school with the cognitive skills needed to be successful, but only 40% have the social-emotional skills needed to succeed in kindergarten.

Research has indicated that, in conjunction with cognitive competence (e.g., reading, writing, and critical thinking skills), social-emotional competence (e.g., collaboration skills, motivation, and study skills) is an important predictor of academic achievement (e.g., DiPerna and Elliot 2002). For example, based on a meta-analysis of 270 research studies, Wang et al. (1993) found that affective and motivational factors had greater influence on school learning than peer group, school culture, or classroom instructional methods. In another study, Bernard (2004b) found that social-emotional competence was a significant predictor of five-year-old children's levels of reading achievement. In addition, Bernard found that children considered to be "at-risk" for academic difficulties displayed significantly lower levels of competence in the areas of confidence, persistence and organisation.

There is some disagreement in the early childhood field concerning optimum and developmentally appropriate ways to teach young children social and emotional skills. Some early childhood scholars assert that—for developmental reasons—teacher-led, explicit curriculum lessons are not appropriate for teaching social and emotional skills to young children (e.g., Whittington and Floyd 2009). They indicate that social and emotional development is best fostered by placing children in carefully tailored, caring environments with adults who respond in particular ways (e.g., Hyson 2004). Many early childhood educators advocate the use of games and stories as methods to teach social and emotional competencies (e.g., Cohen 2001).

Studies have investigated the effectiveness of social and emotional learning (SEL) programs that include formal lessons and that begin during the preschool years and have demonstrated positive results (e.g., Payton et al. 2008). Joseph and Strain's (2003) review of the efficacy of eight social-emotional curricula found that the most successful social-emotional approaches focus on social skills and emotional development on a daily basis, use a systematic, intentional approach for teaching critical skills, and acknowledge the skills in context.

In a meta-analysis of 34 universal and targeted pre-school prevention programs, Nelson et al. (2003) found that, overall, SEL programs had positive effects on both cognitive and academic outcomes in the short term (pre-school), medium term (primary school), and long term (high school). The results also indicated that the programs that contained a direct teaching component (including

explicit lessons in curriculum format) and those that were of greater intensity and longer duration had a bigger positive effect on outcomes.

A recent review of research on the effects of pre-school education yielded an integrated model of both approaches. Effective teaching in early childhood education is seen to require skillful combinations of explicit instruction, sensitive and warm interactions, responsive feedback, and verbal engagement or stimulation intentionally directed to ensure children's learning while embedding these interactions in a classroom environment that is not overly structured or regimented (Pianta et al. 2009).

Some of the more popular early childhood social-emotional curriculum written about in the literature include: *I Can Problem Solve* (Shure and Spivack 1980), *First Steps to Success* (Walker et al. 1997), and *Second Step* (McMahon et al. 2000). There is some empirical evidence about the effectiveness and implementation of these programs to teach social skills to young children and prevent or address challenging behavior; the strength of the evidence varies by program or approach (Hemmeter et al. 2006).

A SEL program that involves teachers presenting activities from a formal curriculum that explicitly teach young children social and emotional competencies and which are currently being implemented in hundreds of schools throughout Australia, is *You Can Do It! Education* (YCDI) (e.g., Bernard 2002, 2004a, 2007). YCDI is a cognitive-behavioural approach to teaching social and emotional skills and competencies. It is based on a number of social learning, educational, and cognitive-behavioural theories, including those of Vygotsky, Ellis, Bandura, and Seligman, which together highlight the impact of the important role of children's thinking and self-talk on their emotions and behaviours.

The aim of YCDI (Bernard 2002, 2004a, 2007) is for all young people to achieve positive, social, emotional, and behavioural and achievement outcomes. According to Bernard, these objectives can be achieved by providing children with explicit instruction in five key social-emotional competencies (the 'Five Foundations')—Confidence, Persistence, Organisation, Getting Along, and Emotional Resilience. These Foundations are supported by the explicit teaching of 12 particular ways of thinking ('Habits of the Mind')—I Can Do It, Accepting Myself, Taking Risks, Being Independent, Giving Effort, Working Tough, Setting Goals, Planning My Time, Being Tolerant of Others, Thinking First, Playing by the Rules, and Being Socially Responsible.

There have been a number of studies that have demonstrated positive results for YCDI (Bernard 2006, 2008; Bernard and Walton 2011) with older school-age children. In order to provide younger children with the opportunity

to further develop the competencies and skills emphasised by YCDI, Bernard (2004a) developed the *You Can Do It! Early Childhood Education Program*, a curriculum-based program designed to be run by teachers with children aged from four- to seven-years-old.

There has not yet been a controlled study that has investigated the effect of the *You Can Do It! Early Childhood Education Program* on the social and emotional competencies, well-being, and academic achievement of young children in Australia. This study was therefore designed to address this issue. Three main hypotheses were proposed. First, it was hypothesised that young children who received the YCDI program would display significantly greater gains in their levels of *social and emotional competence* than those who did not receive the program. Second, it was hypothesised that the young children who received the YCDI program would also display significantly greater gains in their levels of *social and emotional well-being* than those who did not receive the program. If this hypothesis was supported, then the YCDI group would show a greater decrease in problem behaviours, as well as a greater increase in positive social-emotional well-being. Third, it was hypothesised that young children who received the YCDI program would display significantly greater gains in their levels of *academic achievement* than those who did not receive the program. If this hypothesis were supported, the YCDI group would show a greater increase in their independent reading levels than the non-YCDI group.

Method

Participants

The participants were four teachers and 100 students (from two Prep and two Grade 1 classes) from a Catholic school in the western suburbs of Melbourne, Australia. The participating school had been identified as being of 'low socio-economic status' according to the Catholic Education Office (Melbourne). Approximately two-thirds of the students who attend the school speak English as a second language. One student departed the school during the course of the study, leaving total of 99 (45 female and 54 male) students for whom a complete data set was available. Of the 99 students, 42 (42.4%) were in preparatory classes (five year olds) and 57 (57.6%) were in grade 1. English was the main language spoken at home for 46% of students. The next highest percentage of students (37.4%) spoke an Asian language other than Chinese at home. Comments written on the teachers' questionnaires indicated that the majority of these students spoke Vietnamese. The remaining students spoke various African (4%),

Chinese (3.0%), European (8.1%), and Pacific Island (1%) languages at home.

One preparatory and one grade 1 class were randomly assigned to receive the YCDI curriculum. These students received lessons from the *You Can Do It! Early Childhood Education program* (Bernard 2004a, b) and delivered by their regular classroom teachers over a 10-week period during Terms 2, 3, and 4, 2009. The students from the remaining preparatory and grade 1 class did not receive the program during the study, thereby serving as a comparison group. However, in order to avoid disadvantaging the comparison group, the teachers of these classes began implementing the program after the completion of the post-program measures (in Term 4).

Measures

All four teachers participating in the study were asked to complete two questionnaires for each student. These surveys were completed immediately before and after the implementation of the program for the YCDI classes, and at similar times for the non-YCDI classes. Information on the student's gender and main language spoken at home was also collected.

The first questionnaire used was the *ACER Well-being Survey (Teacher Form—Early Years)* (Bernard et al. 2009). This survey consists of 50 items. Teachers are asked to indicate their agreement or disagreement with each item (e.g. "The student appears to do what is asked of him/her.") on a four-point Likert scale (1 = strongly disagree, 4 = strongly agree). Part 1 consists of 22 items and measures students' levels of *social-emotional well-being*. This is defined as the presence of positive emotions and behaviours (e.g. "The student appears to be generally happy and cheerful") and the absence of negative emotions and behaviours (e.g. "The student appears to say 'mean' things to intentionally hurt someone else"). Part 2 consists of 28 items and measures students' *social-emotional competence*. Within Part 2, three clusters of items are represented: Positive Self-Orientation, Positive Social Orientation, and Positive Work Orientation. The *Positive Self-Orientation* subscale measures *resilience* (in terms of attitudes and coping skills). An example item is: "The child appears to control his/her behaviour when he/she is very angry and feels like lashing out". The *Positive Social Orientation* subscale measures *social skills and values*. An example item is: "The child appears to value doing things to help others." The *Positive Work Orientation* subscale measures *work management and engagement skills*. An example item is: "The child appears to raise his/her hand to answer a difficult question even when unsure if the answer is correct." The ACER Well-being Surveys (Teacher Forms; Student Forms) have been validated from data

provided by over 6,000 teachers. Cronbach alpha reliabilities in the order of 0.9 are reported (Bernard et al. 2007). Validity of the survey has been determined through the use of Rasch measurement methods (Bond and Fox 2007), including item characteristic curves confirming that all items on the survey measured the construct of well-being of students and that the requirements of measurement are satisfactorily met (Bernard et al. 2007).

The second questionnaire used was the *Social Skills Rating System—Teacher Form (SSRS-T)* (Gresham and Elliot 1990). This survey consists of 57 items divided into three scales: Social Skills, Problem Behaviours and Academic Competence. According to the manual, the SSRS-T has demonstrated high internal consistency and test–retest reliability as well as adequate content and criterion validity. On the *Social Skills* scale (30 items) teachers rate how often the student engages in each of the behaviours described (e.g. “Introduces herself or himself to new people without being told”) from 0 (never) to 2 (very often). Within the Social Skills scale there are also three subscales, each consisting of 10 items: *Co-operation*, *Assertion*, and *Self-control*. Teachers can also rate how important each of these behaviours are for success in their classroom from 0 (not important) to 2 (critical); however, these ratings were judged as unnecessary in this study, and were therefore not used. On the *Problem Behaviours* scale (18 items) teachers rate how often the student engages in each of the behaviours described (e.g. “argues with others”) from 0 (never) to 2 (very often). Within the Problem Behaviours scale there are also three subscales, each consisting of six items: *Externalizing Behaviours*, *Internalizing Behaviours*, and *Hyperactivity*. Finally, on the *Academic Competence* scale (9 items) teachers rate how the student’s levels of academic achievement compares to other students in the class, from 0 (in the lowest 10%) to 5 (in the highest 10%). This scale was judged to be inappropriate for investigating mean group changes over time and was, therefore, not used in this study.

As an alternative to the SSRS-T Academic Competence scale, teachers were asked to report each student’s *Independent Text Reading Level* at each time point. These reading levels range from 0 (lowest) to 28 (highest), and indicate the text difficulty level that the child can read independently. The school reported that they expect students to achieve Level 5 by the end of Prep, Level 20 by the end of Grade 1, and Level 28 by the end of Grade 2.

Treatment Integrity

A classroom observation form was developed to investigate program implementation integrity. This observer rating form measured the extent to which teachers: followed the YCDI lesson plans, were well-prepared and presented the

lessons as intended in the lesson plan, provided helpful feedback to children, checked understanding with individual children and presented the lesson in a positive and enthusiastic fashion. Each teacher’s behaviours in each of these areas was rated on a three-point scale from 1 (=not at all) to 3 (=very much). The first author completed this form twice for each YCDI teacher while observing the lessons being presented.

Education Program

Teachers in the YCDI groups were trained in the use of the following different components of the YCDI Early Childhood program. (1) The YCDI Social and Emotional Learning Curriculum consisting of many structured lessons containing activities that presented the emotional, behavioural and attitudinal (self-talk) characteristics of confidence, persistence, organisation and emotional resilience. The activities incorporate the following explicit and direct instructional practices: operationally defining social and emotional skills in terms of concrete, observable behaviours that are described, modelled and role played, communication of behaviour-specific feedback when children display social and emotional learning behaviour, explicit teaching (e.g., present new material in small steps, giving clear and detailed instructions and explanations, providing active practice for all learners, asking questions to check for understanding, guiding learners during initial practice, continued practice until learners are independent and confident) and explicit teaching of self-talk; (2) use of hand puppets to explain and illustrate ideas to young children (e.g., Connie Confidence, Pete Persistence) (3) four songs for children to sing that contain lyrics supporting what young children learn in their lessons (e.g., “I’m Connie Confidence and I like to take a chance, I tell myself I can do it.”) (4) multiple colourful posters of each character (Connie Confidence, Pete Persistence, Oscar Organisation and Ricky Resilience) that illustrate each character learning the relevant behaviours and positive self-talk, and (5) good classroom practices for establishing a social and emotional learning environment (e.g., select examples of stories from young children’s literature to read aloud and songs to sing that portray a character demonstrating one or more social and emotional learning skills, daily reminders and reflections, wall displays).

Procedure

One Preparatory and one grade 1 class were randomly selected to implement the program (the YCDI classes) and the other two classes served as a comparison group (the non-YCDI classes). All four teachers completed both the two questionnaires and the reading levels for each student.

Following this, the teachers from the YCDI classes were trained in the implementation of the *You Can Do It! Early Childhood Education Program*, by Professor Michael E. Bernard, the Founder of YCDI, during a 2-h professional development session at the school. The YCDI teachers then began implementing the program in their classrooms at the end of Term 2. This involved running approximately three 20-min YCDI lessons per week, as well as supporting the students to practice the YCDI skills they were learning on an ongoing basis throughout the school day.

Preparatory and grade 1 teachers presenting YCDI spent 2 weeks (approximately six lessons) providing direct instruction in four social and emotional competencies: confidence, persistence, organisation and emotional resilience. It is important to note that because the two YCDI teachers independently selected the YCDI lessons that they delivered to their classes, the Prep and Grade 1 students did not receive exactly the same program content.

Data Analysis

The data collected from the two questionnaires, as well as the teacher-reported student reading levels, were entered into the statistical package SPSS v.15 for analysis. The WBS was recoded from a four-point scale to a five-point scale, and any missing data was estimated using the Expectation Maximization (EM) method. Based on the internal consistency and normality of each scale of the WBS and SSRS-T, five variables (scales) were selected for further analysis. Two variables were chosen to measure social-emotional well-being: Positive Social-Emotional Well-being (all items from Part 1 of the WBS) and Total Problem Behaviours (items 31–48 from the SSRS-T). Two variables were chosen to measure social-emotional competence: Total Social-Emotional Competence (all items from Part 2 of the WBS) and Total Social Skills (items 1–30 from the SSRS-T). Reading Level was retained as the measure of academic achievement.

Results

Treatment Integrity

The ratings of each YCDI teacher on the classroom observation form indicated that both YCDI teachers were well prepared, provided helpful comments to children, checked that individual children understood the lessons, and presented the lessons with enthusiasm. However, neither teacher closely followed the scripted lesson plans in the YCDI curriculum manual. The Prep teacher covered the general content of the lesson plan during both observations, but significantly modified the lesson plans contained in the

YCDI curriculum manual. On both occasions that the Grade 1 teacher was observed, she presented activities from the curriculum as well as additional ones that she had created based on the lessons in the YCDI curriculum program. For example, during the first observation she read the children a story about a character that demonstrated persistence and then gave them a worksheet that she had adapted from an YCDI lesson, which asked questions about how the character had shown persistence. As the Grade 1 YCDI class showed more robust improvements than the Prep YCDI class, it may be the case that the impact of the YCDI intervention is greater when teachers rely on the explicit teaching guidance contained in the YCDI curriculum concerning how the content of the lesson should be delivered.

Impact of Treatment

As will be seen below, the data was examined in two ways. First, the impact of YCDI across all social-emotional measures (called the combined variable) was examined using a multivariate analysis of variance. The dependent variables included in the combined variable included: Positive Social-Emotional Well-being, Total Problem Behavior, Total Social-Emotional Competence and Total Social Skills. Second, the impact of YCDI on the separate dependent measures including Reading Level was examined using an analysis of variance.

For both the MANOVA and ANOVA analyses, tests of interactions enabled the determination to be made as to whether YCDI produced greater gains over time for the YCDI group of students. As well, tests of interaction enabled a judgment to be made as to whether the impact of YCDI over time was consistent or different for Prep and Grade 1 classes.

Measures of Social-Emotional Well-being and Social-Emotional Competence

A mixed within-between subjects MANOVA was carried out in order to determine whether group (YCDI: non-YCDI class) and grade (Prep; Grade 1) influenced the students' levels of social-emotional well-being and competence. The results indicated that there were significant multivariate effects (Pillai's $F_{4,92} = 12487.40$, $p < 0.01$, partial $\eta^2 = 0.99$). Further interpretation revealed that there were no significant differences between the Prep and Grade 1 students on the combined dependent variable (Pillai's $F_{4,92} = 0.82$, ns, partial $\eta^2 = 0.03$). However, there was a significant difference between the YCDI and non-YCDI groups (Pillai's $F_{4,92} = 6.93$, $p < 0.01$, partial $\eta^2 = 0.23$), as well as a significant interaction between grade and group (Pillai's $F_{4,92} = 15.19$, $p < 0.01$, partial $\eta^2 = 0.40$) on the combined dependent variable.

Table 1 Mean levels of social-emotional well-being, social-emotional competence, social skills, and reading levels by grade and group

Measure	Group	Grade							
		Prep (<i>N</i> = 42)				Grade 1 (<i>N</i> = 57)			
		Pre-test		Post-test		Pre-test		Post-test	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Positive social-emotional well-being	YCDI	90.57	11.17	96.38	8.49	90.07	9.65	95.02	8.06
	Non-YCDI	83.33	8.03	85.19	9.98	89.39	7.23	85.42	7.93
Total problem behaviors	YCDI	2.02	1.21	2.37	0.99	2.17	0.72	1.44	0.79
	Non-YCDI	2.66	1.21	2.45	0.74	2.97	0.87	3.15	0.67
Total social-emotional competence	YCDI	102.57	14.85	110.87	10.70	105.31	15.05	116.85	12.56
	Non-YCDI	99.97	7.80	101.80	10.81	98.37	9.06	97.37	11.72
Total social skills	YCDI	42.94	10.31	45.66	9.60	40.59	9.12	46.28	8.62
	Non-YCDI	38.46	8.51	38.33	5.49	42.50	6.45	34.98	5.83
Reading level	YCDI	5.10	7.10	17.96	7.40	7.86	7.98	24.48	4.86
	Non-YCDI	2.05	2.04	18.24	4.46	5.48	6.29	22.98	5.64

The MANOVA results also revealed that a significant interaction between Time (pre-test; post-test) and group (YCDI vs. non-YCDI class) had an effect on the combined dependent variable (Pillai's $F_{4,92} = 14.69$, $p < 0.01$, partial $\eta^2 = 0.39$). When the results for the dependent variables were considered separately, analyses revealed that this interaction had a significant effect on Positive Social-Emotional Well-being (Pillai's $F_{1,95} = 18.52$, $p < 0.01$, partial $\eta^2 = 0.16$), Total Social-Emotional Competence (Pillai's $F_{1,95} = 25.99$, $p < 0.01$, partial $\eta^2 = 0.22$), and Total Social Skills (Pillai's $F_{1,95} = 43.92$, $p < 0.01$, partial $\eta^2 = 0.32$). An inspection of the table of means indicates that the YCDI classes made greater gains in these three areas than the non-YCDI classes. However, the interaction between time and group had no significant effect on Total Problem Behaviors (Pillai's $F_{1,95} = 1.24$, ns, partial $\eta^2 = 0.013$). This indicates that YCDI did not result in an overall reduction in problem behaviors.

Furthermore, the MANOVA results also indicated that a significant interaction between time (pre-test; post-test), grade (Prep; Grade 1), and group (YCDI; non-YCDI) had an effect on the combined dependent variable (Pillai's $F_{4,92} = 6.84$, $p < 0.01$, partial $\eta^2 = 0.23$). When each dependent variable was analyzed separately the results revealed that this interaction had a significant effect on Total Problem Behaviors (Pillai's $F_{1,95} = 22.89$, $p < 0.01$, partial $\eta^2 = 0.19$) and Total Social Skills (Pillai's $F_{1,95} = 18.30$, $p < 0.01$, partial $\eta^2 = 0.16$). With regard to Total Problem Behaviors, inspections of Table 1 indicate that, while the grade 1 YCDI class displayed a reduction in problem behaviors, the preparatory YCDI class did not. The grade 1 non-YCDI class displayed an increase in problem behaviors, while the Prep non-YCDI class displayed a decrease.

With regard to Total Social Skills, inspection of Table 1 indicates that the Prep and Grade 1 YCDI classes both displayed an increase in Total Social Skills over time; however, the increase for the grade 1 students was larger than that for the preparatory students. In addition, while the preparatory non-YCDI class displayed similar levels of Total Social Skills at Time 1 and Time 2, the grade 1 non-YCDI class displayed a large decrease in Total Social Skills over time.

There were a number of differences between the mean scores of male and female students in both the YCDI and non-YCDI classes on each of the dependent variables at both time points. Males displayed higher levels of problem behaviors, and lower levels of social-emotional well-being, social-emotional competence, and social skills. Therefore, a separate mixed within-between subjects MANOVA was carried out in order to determine whether gender influenced the effectiveness of YCDI. The results revealed that gender had a significant main effect on the combined dependent variable (Pillai's $F_{4,92} = 6.45$, $p < 0.01$, partial $\eta^2 = 0.22$). When each of the individual dependent variables was considered separately, the results indicated that males and females differed significantly on all four measures: Positive Social-Emotional Well-being (Pillai's $F_{1,95} = 13.71$, $p < 0.01$, partial $\eta^2 = 0.13$), Total Problem Behaviors (Pillai's $F_{1,95} = 7.13$, $p < 0.01$, partial $\eta^2 = 0.07$), Total Social-Emotional Competence (Pillai's $F_{1,95} = 22.07$, $p < 0.01$, partial $\eta^2 = 0.19$), and Total Social Skills (Pillai's $F_{1,95} = 22.35$, $p < 0.01$, partial $\eta^2 = 0.19$). However, there were no significant interactions between gender and time, gender and group, or gender, group and time. These results indicate that there were no differences in the effectiveness of YCDI between males and females.

Table 2 Mean reading levels for the 50% of students with the lowest reading levels at time 1

Measure	Group	Grade							
		Prep ($N = 39$)				Grade 1 ($N = 14$)			
		Pre-test		Post-test		Pre-test		Post-test	
		M	SD	M	SD	M	SD	M	SD
Reading level	YCDI	2.78	3.51	5.56	4.64	9.25	3.73	19.12	4.79
	Non-YCDI	2.05	2.04	5.48	4.46	10.50	3.21	15.24	3.68

Reading Level

A mixed between-within subjects analysis of variance (ANOVA) was conducted to explore the impact of YCDI and grade on reading levels. There was a significant main effect for time (Pillai's $F_{1,95} = 128.91$, $p > 0.01$, partial $\eta^2 = 0.58$), indicating that the students' reading levels increased over time. There was also a significant interaction between time and grade on reading level (Pillai's $F_{1,95} = 10.87$, $p = 0.01$, partial $\eta^2 = 0.10$); however, the interaction between time and group was non-significant (Pillai's $F_{1,95} = 0.51$, ns, partial $\eta^2 = 0.01$), indicating that gains in reading achievement were unrelated to YCDI. A second mixed between-within subjects ANOVA was carried out in order to explore the impact of YCDI and grade on the reading levels of the 50% of children who had the lowest reading levels at Time 1 (see Table 2). The results of this ANOVA showed that an interaction between time and group had a significant effect on reading levels (Pillai's $F_{1,49} = 6.56$, $p < 0.05$, partial $\eta^2 = 0.12$). This indicates that YCDI had a positive effect on the reading achievement of the less advanced readers in the study. There was also an interaction between time, group, and grade that had a significant effect on reading levels (Pillai's $F_{1,49} = 10.93$, $p < 0.01$, partial $\eta^2 = 0.18$). An examination of the group means indicates that students in the grade 1 YCDI class showed a greater gain than the grade 1 non-YCDI class, but the Prep YCDI and non-YCDI classes showed similar gains. This indicates that YCDI only had a positive effect on the reading levels of the less advanced readers in grade 1.

Discussion

Overall, the pattern of results are consistent with growing research evidence that indicates that a social and emotional learning program that includes explicit instruction in the form of teacher-led lessons has a place in the early years (e.g., Joseph and Strain 2003). While this study did not isolate the relative effects of the curriculum lessons employed from the modelling, reinforcement and general

conversations between teacher and young children that supported the social and emotional learning skills taught in the lessons, it would seem that the combined effects are stronger than the effects of teachers responding in less structured ways to children in particular ways surrounding their social and emotional development.

The results of this study indicate that the *You Can Do It! Early Childhood Education Program* was an effective way of improving the *social and emotional competence* of young children. Specifically, the students in the study who received YCDI, delivered by their teachers as part of the curriculum, displayed significantly greater gains in their teacher-rated levels of social-emotional competence (measured in terms of items associated with positive self-orientation, positive other-orientation, and positive work-orientation) and social skills (measured in terms of items associated with co-operation, assertion, and self-control) than the students who did not receive the program. Especially at Grade 1, the degree of improvement is substantial and suggests the impact of the YCI program is likely to have practical significance for young children. According to their teachers' ratings, after the YCDI program the students in the YCDI classes were considerably more able to manage their emotions, get along with others, and engage in their academic learning, than the students in the non-YCDI classes. These results support previous research that has shown that YCDI (in its various formats) is an effective way of teaching key social and emotional skills (e.g., Bernard 2006, 2008; Bernard and Walton 2011), as well as more general research showing the effectiveness of a range of SEL programs (e.g. Nelson et al. 2003; Payton et al. 2008).

The results also indicated that that, although the preparatory and grade 1 students improved in their teacher-reported levels of social skills, the grade 1 students showed a greater improvement than the preparatory students. However, there were no differences between males or females, or between the students who spoke different first languages, on the impact of YCDI on social-emotional competence. This indicates that the program was equally effective for male and female, and English and non-English speaking students.

The students in the YCDI classes also displayed significantly greater gains in their levels of *positive social-emotional well-being* (measured in terms of items associated with the presence of positive emotions and behaviours, and the absence of negative emotions and behaviours) after the program than the students in the non-YCDI classes. Furthermore, both YCDI classes showed similar increases in positive social-emotional well-being, indicating that the program was equally effective for the preparatory and grade 1 students. Among the non-YCDI classes, the preparatory students made small gains in social-emotional well-being, while the grade 1 students displayed a reduction in this area. There were no differences between males or females, or between the students who spoke different first languages, on the impact of YCDI on positive social-emotional well-being. These results further support and extend past research (e.g., Bernard 2007) by indicating that teaching key social and emotional skills, in the format of YCDI, was an effective way of improving the social-emotional well-being of the preparatory and grade 1 students in this study.

In contrast to the finding that YCDI was effective at promoting an increase in positive social-emotional well-being, there was no evidence that YCDI resulted in an overall reduction in *total problem behaviours* (measured in terms of externalising, internalising, and hyperactivity problems). However, these results did differ between the YCDI classes. Specifically, the grade 1 YCDI students did display a significantly greater reduction in their levels of problem behaviours than the grade 1 non-YCDI students, while the preparatory YCDI students did not. This indicates that the program was effective at reducing the problem behaviours displayed by the grade 1 students, but not by the Prep students.

In terms of the impact of YCDI on academic achievement, the results of this study showed no significant differences in reading levels between the YCDI and non-YCDI students after the program. However, when the progress of the 50% of students who displayed the lowest reading levels before the program was investigated, the students from the YCDI classes displayed greater gains in their levels of reading achievement than the students in the non-YCDI classes. The magnitude of improvement for the YCDI class was robust exceeding two standard deviations suggesting that the YCDI intervention had not only statistical but practical significance. However, once again these results varied by grade with only the grade 1 YCDI lower achievers displaying a significantly greater gain in reading achievement relative to their peers. These results provide some support for the third hypothesis, by indicating that YCDI was an effective way of improving the reading levels of low achievers.

The results also indicated that the program was equally effective for children from a range of cultural backgrounds. This is an important finding, given that 54% of the students

in the study did not speak English as their first language. This finding is also important given that researchers have argued that there is a need for further research into the cultural relevance of various SEL programs (e.g. Humphries and Keenan 2006).

Methodological Limitations

The first limitation is that the study was conducted in only one school, meaning that it is not possible to generalise these results to other schools, particularly those who have students from different socio-economic or cultural backgrounds. A second limitation of the study was that the sample size was relatively small, with only 99 students and four teachers participating. This meant that it was only appropriate to investigate a small number of dependent variables. Therefore, it was not possible to state whether the YCDI students improved in particular areas of social-emotional competence (e.g. resilience, academic engagement, cooperation) or well-being (e.g. externalising or internalising problems). A third limitation to this study was the choice of measurements used to estimate the students' levels of academic achievement. Independent text reading levels were used, as they were easy for teachers to complete and did not require the students to undergo any additional assessment. However, this measure is only a rating of the students' ability to decode text. Therefore, although some positive results were found for the effect of YCDI on reading levels, it is not appropriate to state that YCDI has a positive effect on students' overall levels of academic competence without further research. Another limitation of the study was that the teachers knew which group they were in (e.g., YCDI or non-YCDI) which could have biased their ratings of their students. The final limitation was that the results of this study are based only on teacher-reported levels of social-emotional competence and well-being. Although teacher reports are one way in which to obtain information on students' functioning, they should ideally be supplemented by parent-reports and/or direct observations.

It would be beneficial for future research to investigate whether the benefits of the program are maintained in the long term. Longitudinal research into the effectiveness of other programs has shown that some do have long-term benefit; however, these do tend to decrease over time (Nelson et al. 2003; Payton et al. 2008).

Conclusions

In summary, the results of this study provided further support for the view that social-emotional competence is foundation for the achievement and well-being of young

children (Center on the Social Emotional Foundations for Early Learning 2008). The results also support the findings of a number of other researchers who have argued that, by improving children's levels of social-emotional competence through explicit instruction, it is possible to improve their levels of social-emotional well-being and academic achievement (e.g. Nelson et al. 2003; Payton et al. 2008). Future research into the long-term benefits of the program, as well as the conditions under which it is most effective, would provide additional insight into the value of YCDI as a pro-active universal mental health prevention program for young children. It is suggested that, given the complexity and difficulty of teaching social and emotional skills effectively, early childhood educators (and young children) can benefit from the use of explicit and direct instructional practices contained in formal social and emotional curriculum lessons.

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