

Running Head: ADVENTURE PROGRAMS

Fostering Initiative and Bridging Differences: An Outcome Evaluation of an  
Adventure Program for Youth.

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### Abstract

Limited research has examined processes within adventure programs that result in positive outcomes (Hattie et al., 1997). In the present thesis, the Young Canadian Leadership Challenge program was evaluated to determine whether the opportunities for initiative and bridging differences with diverse youth were key to short- and longer-term improvements in participants' self-concepts and initiative behaviours. A pre/post/follow-up evaluation design indicated that, for participants in the YCLC program ( $n=44$ ) initiative experiences in the program did not affect initiative in everyday personal projects. Further, relations between diversity experiences and higher inclusiveness were evident, but these were also evident in a comparison group of youth ( $n=42$ ) who participated in other structured voluntary activities. In sum, program effectiveness varied as a function of program integrity, however, even under the more ideal circumstances, effects were short-lasting and youth were not significantly different from the comparison group on any outcomes.

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## Introduction

Adventure programs have received considerable attention in the literature (e.g., Wilson & Lipsey, 2000). Although these programs vary extensively in terms of settings, types of physical activities, and therapeutic goals, they are grounded in the field of experiential education, or “learning by doing” (Gass, 1993). Generally, groups of youth participate in a series of physically and mentally demanding challenges (such as backpacking or rock climbing), usually in an outdoor environment. Overcoming these challenges generally requires frequent and intense group interaction, group problem solving and decision making (Gass, 1993; Hattie et al., 1997; Outward Bound Canada, 2001).

One reason these programs are of interest is that their impact on youth skills and well-being have been found to be effective in several respects (e.g., Hattie, Marsh, Neill & Richards, 1997). A broad range of outcome variables have been examined, spanning self-concept to physical fitness, with most programs boasting favourable findings (Hattie et al., 1997). However, several researchers have lamented the lack of attention paid to connecting program process to outcome (e.g., Oden, 1995), in that there is little awareness of the specific components of these programs that are having an impact, or how these activities translate into psychosocial processes that result in favourable outcomes.

In this regard, recent research (Larson, 2000) has proposed that these programs may facilitate the development of *initiative*, as an organismic developmental change emanating from adventure programs, resulting in improved self-regulation, self-efficacy, and time management. This construct, however, does not explain the changes in

interpersonal attitudes and behaviours that also apparently result from participation (e.g., cooperation, and increased understanding and appreciation for others). To this end, theories of intergroup relations, and in particular, self-categorization theory (Turner, 1987) may prove useful. Specifically, it is possible that the group-based activities in these settings promote prosocial normative behaviour, and encourage the internalization of these norms and redefined social identity.

This research will discuss the ways in which adventure programs may facilitate Larson's (2000) initiative and Turner's (1987) self-categorization of youth with respect to a more prosocial and inclusive social identity. The role of these processes will be evaluated in relation to the impacts of participation in one adventure program, *the Young Canadian Leadership Challenge®*

#### *Developmental Opportunities for Initiative in Youths' Daily Lives*

It has been argued that sufficient opportunities may not exist, at least in Western society, for children and adolescents to practice initiative (Larson, 2000; Schlegel & Barry, 1991). Initiative can be defined as "the ability to be motivated from within to direct attention and effort toward a challenging goal" (Larson, 2000, p.170). It is related to the capacity for agency or for autonomous action (Brandtstädtter, 1998; Deci, 1995, Ryan, 1993), and the ability to carry out a "personal project" (Little, 1983, 1998). Initiative is a multidimensional construct, and based on focus groups conducted with adolescents involved in a variety of youth activities, has been conceptualized as involving four main dimensions: goal setting (setting goals, achieving goals, and considering possible obstacles when planning), effort (energy, drive, and focused attention), problem-solving (learning from others, developing plans, imagination), and time management

(organizing time, not procrastinating, setting priorities, practicing self-discipline) (Hansen & Larson, 2003).

It has been argued that adolescents' lives in school, leisure, and family contexts are structured in a way that does not provide opportunities - or incentive - to "prepare, plan, execute and assess goals and activities" (Heath, 1999, p.64). Schlegel and Barry (1991) found that American and European adolescents were given less responsibility and fewer opportunities to engage in consequential and planful action than were adolescents in most other cultures. Larson (2000) argues that a symptom of the lack of initiative is the high rates of boredom reported by youth. Larson and Richards (1991) found that youth reported feeling bored for 27% of the random moments they were contacted by researchers over the course of a week, with honour students being equally likely to report high rates of boredom as adolescents involved in delinquent activities (Larson & Richards, 1991). The authors did not report on students who reported low rates of boredom, but perhaps these students may have possessed something, such as initiative, which allowed them to perceive more control over their daily activities.

#### *Adolescents' Cognitive and Physiological Capacity for Initiative*

As initiative involves not only the instigation, but the carrying-through and completion of a project, the cognitive capacity for initiative is dependent not only on opportunities for expressing it, but in addition, on one's ability to plan (Larson & Hansen, 2005), which involves multiple competencies, such as problem representation, foresight, and self-regulation (Friedman & Scholnick, 1997). Individuals acquire these abilities rapidly in adolescence (Keating, 2004; Larson & Hansen, 2005), as they form the cognitive capacity for formal operational thought, abstract concepts, and meta-cognition

(specifically, thinking about the process of planning itself) (Mascolo, Fischer & Neimeyer, 1999). These new ‘cognitive tools’ (Larson & Hansen, 2005, p.4) make possible the processes inherent in long-term planning, such as problem solving, goal-setting, self-evaluation, and self-regulation.

Adolescents, however, still face obstacles to showing initiative. They may have limited abilities in coordinating the multiple aspects involved in reaching a long-term goal (Mascolo et al., 1999), and their conception of the future may still be unelaborated (Nurmi, 1991). This lack of strategic thinking and foresight may impair their planning capabilities (Larson, Hansen & Walker, 2005) In addition to this, adolescents are still developing abilities to understand and manage their emotions. Therefore, encountering frustration, anxiety, and boredom can disrupt their ability to sustain attention to a long-term project (Larson, 1985). In short, there are barriers to adolescents’ ability to organize future plans within a complex environment (Larsen et al., 2005).

An important insight from developmental research, however, is that acquisition of new cognitive abilities (i.e., the ability to show initiative) is highly dependent on an individual’s experience in that particular area of ability (Friedman & Scholnick, 1997; Gauvain, 2001; Larson & Hansen, 2005). Supporting this, cross-cultural research has shown that certain cognitive capabilities develop in response to the demands of their environment. For example, the Canadian Inuit develop greater spatial reasoning skills, required by their nomadic, hunter-gatherer lifestyle (Dasen, 1984). A corresponding relationship has been found between experience and brain development, in that the frontal cortex of the brain, which plays an important role in self-regulation and planning, is still developing during adolescence (Gauvain, 2001). However, evidence exists that

brain development and experience influence each other reciprocally (Dasen, 1984; Shonkoff & Phillips, 2000). Therefore, although adolescents' initiative is related to their age, it is also – perhaps just as profoundly – related to their experience (Larson & Hansen, 2005).

If cognitive and physiological abilities are contingent upon experience, adolescence may be a particularly important time to provide opportunities to youth to develop these areas of ability. For example, researchers have found that children and adolescents are more capable of showing initiative (i.e., drawing up and executing in-depth plans) when they are assisted by others (Larson et al., 2005). Parents, in particular, are the major guides to initiative in childhood. When they are less involved in adolescents' daily lives, and engage in less shared planning with them (Gauvain, 1999), a gap in opportunities results for teenagers to continue developing their planning and initiative skills (Larson et al., 2005). This is a gap that might be filled by participation in appropriate and well-conducted youth programs.

#### *Structured Voluntary Activities as a Context for Developing Initiative*

Youth programs typically fit under the domain of 'structured voluntary activities', or voluntary activities that provide some structure, such as sports, arts, and community or leisure activities. Examples of these activities include piano lessons, band, basketball, and computer clubs (Hansen, Larson, & Dworkin, 2003; Larson, 2000). Activities can be solitary pursuits (such as designing a computer game or playing the cello), but often they are group activities (sports teams, clubs, bands, etc.).

To explore the connection between taking part in these activities and initiative experiences, Hansen and colleagues (2003) surveyed high school students' experiences

across work, school, and times socializing with friends, along with structured voluntary activities. Students reported a higher frequency of initiative experiences (setting goals, effort and perseverance, solving problems, and managing time) within structured voluntary activities, compared with participating in academic classes and socializing with friends (Hansen et al., 2003; Larson & Verma, 1999). Students also reported a fairly consistent rate of initiative experiences across different types of structured voluntary activities, including faith based and service activities, academic and leadership activities, performance and fine arts activities, community and vocational activities, and sports (Hansen et al., 2003), suggesting that these activities shared common conditions that facilitated initiative. Indeed, it has been suggested that initiative experiences might be the defining difference between these structured voluntary activities and other contexts (school/leisure) (Larson, 2000). Several other domains of experience were also assessed across activities (e.g., identity experiences, interpersonal relationships, team work), and the strongest differences by far between structured voluntary activities and school/leisure were found for experiences related to learning initiative (Hansen et al., 2003).

Larson (2000) posits that the common conditions of structured voluntary activities comprise three key elements that occur together: intrinsic motivation, concerted engagement (concentration), and a temporal arc of effort over time. The first element, intrinsic motivation, is present when one is engaged in an activity for the sheer pleasure of doing the activity. Larson based this on the idea that agency requires one's thoughts and actions to originate voluntarily from the self (Ryan, 1993). The second element is concerted engagement in the environment, or constructive attention in an activity involving challenge, constraints, rules, evaluation, and complexity present in any external

reality<sup>1</sup>. Constructive attention is not just thought and effort at random, but is directed toward achieving a concrete goal (Larson, 2000). The third element is a temporal arc of effort directed toward a goal, necessitating that intrinsic motivation and concerted engagement occur over time, and the consequences of this are that one must face setbacks, re-evaluate plans, and adjust strategies. This third element involves the capacity to carry out a meaningful, long-term personal project (Little, 1983).

Larson (2000) arrived at the conclusion that successful structured voluntary activities provide the first two elements, intrinsic motivation and concerted engagement, based studies using experiential sampling methods (in which youth carried pagers for one week and reported on their activities and experiential states when signaled at random by the pagers). In these studies, youth reported high intrinsic motivation, high concentration and high challenge during structured activities. In contrast, although youth reported high concentration and challenge in academic contexts, they reported low motivation. In leisure activities (most of which involved ‘hanging out’ with peers or watching TV), youth reported high intrinsic motivation and high concentration, but low challenge (Csikszentmihalyi & Larson, 1984; Larson & Kleiber, 1993). Because youth reported a much higher rate of initiative experiences within structured voluntary activities compared with other life contexts, Larson (2000) suggested that initiative was a critical element of these activities. Although Larson (2000) has not collected data with regard to the third

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<sup>1</sup> This element is also a requisite for a “flow” experience (Csikszentmihalyi’s, 1996; Csikszentmihalyi & Larson, 1984), which states that an individual must be challenged in accordance with skill level, concentrate on the task, and receive feedback for actions in order to be in “flow”, or feel a sense of control over one’s actions, and loss of self-consciousness and sense of time. Larson (2000) does not differentiate between these conditions and those for initiative, however, initiative-facilitating conditions should involve this concentration, along with intrinsic motivation, over a period of time (i.e., having a flow experience does not necessitate showing initiative, and initiative involves maintaining one’s motivation and concentration in pursuit of a goal even when flow is not present).

element, an arc of effort over time, this arc is characteristic of many of these activities, in that, many involve cumulative planning and action for the duration of a project or season (Heath, 1993). Moreover, this arc of effort is intrinsic to the definition of initiative, as it is impossible to experience domains of initiative (such as long-term goal setting, perseverance, and managing time) in a fleeting activity.

Despite these positive findings, it has been noted that educational interventions and structured voluntary activities produce effects that are usually small (effect sizes under one percent) (Larson, 2000; Hattie, 1993; Marsh, 1992). As there has been a lack of attention to process and theory in this kind of research (e.g., Oden, 1995), it is difficult to pinpoint why this is so. This underlines the need to identify the processes that are at play within these programs that are critical and relevant to youths' positive development.

#### *Adventure Programs*

Despite not knowing 'why', we do know that one type of structured voluntary activity, the adventure program, tends to produce much larger effects than other youth programs (Cason & Gillis, 1994; Hattie, Marsh, Neill, & Richards, 1997; Wilson & Lipsey, 2000). Adventure programs, also sometimes referred to as experiential education or wilderness therapy, typically involve a group of people venturing together through a variety of mentally and/or physically demanding challenges, such as completing a ropes course or hiking to the top of a mountain. Overcoming the challenges generally requires frequent and intense group interaction, group problem solving and decision making (Gass, 1993; Hattie et al., 1997; Outward Bound Canada, 2001).

Hattie et al. (1997) conducted the most comprehensive meta-analysis to assess outcomes of these programs across a wide range of variables, examining 1728 effect

sizes<sup>2</sup> from 151 unique samples of 96 studies. They were able to find 40 dominant outcomes, and grouped them into categories spanning leadership, self-concept, academic, personality, interpersonal and adventuresomeness. Across all outcome variables, Hattie et al. (1997) found an average effect size of .34, which was comparable to the results of Cason and Gillis (1994), who found an average effect size of .31 for adolescents. Wilson and Lipsey (2000) concentrated on programs for delinquent youth, and found a mean effect size of .18 (equivalent to a recidivism rate of 29 % for program participants versus 37 % for comparison subjects). Furthermore, follow-up evaluations have indicated that some effects are evident long after programs have ended. For example, Hattie et al. (1997) reported that follow-up studies produced a mean effect size of .17 over a mean of 5.5 months. Importantly, this effect size of .17 was over and above the .34 noted immediately after the program, indicating that participants reported even better outcomes several months after the program. This is in contrast to most program evaluations, which overwhelmingly show a decrease in effect sizes in the weeks or months following a program (Hattie et al., 1997).

Adventure programs have generally been evaluated with pre-post assessment, and have ideally included a follow-up assessment and comparison group design, however, Hattie et al. (1997) lament that too many studies have been ‘one-off before-and-after comparisons with small samples’ (p.46). Evaluators tend to use self-report or questionnaires completed by participants and program leaders. Measures are typically administered at the program site; pretest measures tend to be given on the first day of the program, while posttest measures tend to be administered on the last day or in the first week following participation (e.g., Hazelworth & Wilson, 1990).

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<sup>2</sup> These authors used Hedge's g as the measure of effect size.

As previously stated, there is little research examining the processes that produce positive change in structured voluntary activities, and much less examining why adventure programs tend to produce longer lasting outcomes than most interventions. Indeed, despite theoretical postulations and extensive outcome studies, it is unclear what specific processes in adventure programs facilitate change, since much outcome evaluation has been conducted without an underlying theoretical framework (e.g., Hattie et al., 1997; Larson, 2000; Oden, 1995; Roth, Brooks-Gunn, Murray & Foster, 1998; Zwart, 1988).

Larson (2000) suggests that participants' learning of initiative within these programs may account for some of the long-lasting change. Indeed, these programs, based on their core principles, may provide participants with a particularly concentrated opportunity to practice initiative. Kiewa (1994) and Scherl (1988) suggest that when the individual is in a situation where control cannot be exerted over external factors (i.e., nothing can be done about gravity or weather), the only control one can exert is over the self – "to master one's anxiety, one's physical body, to push oneself that little bit more" (Kiewa, 1994, p.37). As a result, when the participants are placed in a stressful situation within an uncontrollable environment, they must learn to exert self-control.

Kiewa (1994) posits that self-control is the major outcome of the adventure process. It is inherent to the domains of initiative, as it is essential in the self-regulatory processes necessary to carry out a project, namely the regulation of effort and attention expended toward a goal, setting priorities, and self-discipline in sticking to those priorities. Similarly, research conducted on the related outcomes of self-efficacy and internal locus of control (Hattie et al., 1997) concurs with Kiewa (1994) in their argument

that “a theme underlying the outcomes with the greatest effects relate to self-control” (Hattie et al., 1997, p.70). Thus, self-control is likely a facilitating condition for showing initiative, and outcomes of adventure programs may reflect its enhancement.

In addition to the development of self-control, meta-analyses and literature reviews of adventure programs consistently identify the presence of the three elements identified earlier as being crucial to initiative (intrinsic motivation in the task, concerted engagement in the environment, and an arc of effort directed toward a goal over time) (Cason & Gillis, 1994; Hattie et al., 1997; Oden, 1995; Roth et al., 1998; Wilson & Lipsey, 2000). These programs provide, in a setting appealing to youth, opportunities for intense challenge and active participation within a framework of increasingly difficult and specific goals, realistic consequences and constraints for choices made by participants, and constructive and immediate feedback for these choices (Hattie et al., 1997; Kiewa, 1994). Improvements have been found on outcomes related to the four key domains of initiative outlined by Larson (2000).

*Goal setting.* Challenges require participants to identify and set both short-term (getting participants to move one by one) and long-term goals (getting one’s team to the top of the mountain). Participants must also consider possible obstacles (i.e., no footholds) when planning (Gass, 1993). Indeed, Hattie et al. (1997) found substantial improvements for related outcomes of decision making across eight studies, and setting goals across 15 studies.

*Problem solving.* When attacking challenges, participants must identify the problem, identify and review possible solutions, choose and implement a solution, and evaluate that solution (Ewert, 1989). Furthermore, they must problem solve within a

group context, requiring compromise (Kiewa, 1994), and identify which behaviours and actions are effective or ineffective for solving problems (Wilson & Lipsey, 2000). Hattie et al. (1997) found pretest to follow-up improvements for problem solving skills, measured by academic competence, across 30 studies. Flexibility, essential for problem solving, was also found to improve across 65 studies.

*Expend ing effort and persevering.* Challenge activities require participants to expend great mental and physical effort - to conjure and enact solutions, deal with interpersonal problems, or help others in the group (Wilson & Lipsey, 2000).

*Time management.* Participants of adventure programs must, as either the natural environment or parameters of the challenges dictate, effectively manage their time to overcome challenges, set priorities in the process of goal-attainment, and practice self-discipline (Kiewa, 1994). Hattie et al. (1997) found substantial improvements for time management from pretest to posttest across 36 studies, and further improvements at follow-up across 13 studies.

In sum, the opportunity for initiative may explain long-term change on outcome variables relating specifically to the individual (such as locus of control, or time management) evidenced following participation in an adventure program. However, it does not explain changes relating to interpersonal attitudes or behaviours. Specifically, there is also evidence that the youth participating in adventure programs show a greater appreciation of others, and increased ability to work *with* others as opposed to against them in pursuit of those goals.

#### *The Group Context of Adventure Programs*

Adventure programs may supply a rare opportunity for youth to “bridge differences”, that is, “to understand, respect, and forge relationships across ethnic, religious, and other dimensions of human diversity” (Watkins, 2003, p.1). Often bringing together youth from diverse backgrounds (Patrick, Ryan, Alfred-Liro, Fredericks, Hruda, & Eccles, 1999), programs may serve as contexts for fostering positive intergroup relations among youth (Larson et al., 2005). These opportunities may be particularly important as high rates of racial intolerance and hate crimes by youth indicate that many adolescents are not developing necessary competencies for understanding and appreciating human diversity (see Watkins, 2003).

Most challenges presented to participants of adventure programs are designed so that they cannot be managed by individuals acting alone, and, ideally, require input from all group members. Competition among participants is de-emphasized, while competition *within* the individual and cooperation among group members is encouraged to achieve both greater intra and interpersonal goals. Although adventure programs are nearly always group experiences, little research addresses how these group processes are related to measurable program outcomes (Hattie et al., 1997). It is clear, however, that participants experience benefits of interpersonal interactions as Hattie et al. (1997) found substantial improvements on outcome variables such as cooperation, relating skills, and social competence that were typically sustained at follow-up.

Qualitative research conducted on other types of positive development programs (e.g., a leadership and career preparatory program, a youth activist program, and an art program directed to disadvantaged youth) have examined the role of the group context on adolescents’ learning experiences (Larson, Jarrett, Hansen, Pearce, Sullivan, Walker et

al., 2004). It was thought that developing competencies to understand and appreciate human diversity may be a crucial developmental process occurring within these programs. Results suggested that youth learned to bridge differences through interacting with others who were different in some way (with individual and group success depending on this interaction), learned about these other youth outside of clique/crowd labels, and began to see them in more human terms. For example, one participant explained her wonder at finding her “clique” hanging out with other cliques that would never have mixed... “Usually, we split up, but we were all in the room laughing. It was weird. You just learn to respect people’s different ways”. Larson et al. (2004) described the adult program leaders as providing conditions closely related to those cited in research on facilitating relationships between cultural groups, namely equal status, cooperative interaction, and individualized contact across groups (Allport, 1954; National Research Council, 2000).

Social identity (Tajfel & Turner, 1979) and self-categorization theories (Turner, 1987) may provide some insight into the social-cognitive processes that facilitate bridging differences, and related program outcomes. Specifically, through completion of shared “superordinate” goals, youth may come to think of themselves and others as being part of a larger category (e.g., humans), rather than as individuals or members of ethnic, religious or other social groups with potentially conflicting values and goals. Self-categorization theory (SCT) argues that individuals define themselves not only in terms of their personal identities but also in terms of social identities, or group memberships (Haslam, 2001; Turner, 1987). Therefore, it is relevant to explore young people’s ability

to think of themselves in terms of other group members, and as a member of a group that subsumes their multiple social identities (Sani & Bennett, 2004).

In recent years, researchers have explored the development of a social identity in children, and have substantiated that social identity/self-categorization principles are relevant to the study of adolescents, in that the emotional and cognitive processes related to a social identity emerged as early as seven years (Sani & Bennett, 2004). As delineated by SCT, youth can perceive their “selves” on three basic levels, including (a) the personal identity level as a unique individual (different from other ingroup members), (b) the social identity level as an ingroup member (distinct from outgroups), and (c) the superordinate human identity level as a member of humanity. For example, a Canadian citizen can view him or herself as an individual (e.g., different from other Canadians), as a Canadian citizen (different from citizens of other countries), and finally, as a member of the human category (different from other species) (Turner, 1987). In general, self-categorization theory proposes that there are conditions under which specific levels of identity, as well as specific group memberships, become cognitively salient in one’s self-concept to influence perception and behaviour (Turner, 1987).

SCT states that group behaviour depends on the formation and internalization of self-defining social categorizations. As self-categorization moves from thinking of the self as an individual to thinking of the self as a group member (Turner, 1982), attitudes and behaviors also shift to reflect the norms of the group. In addition, when people categorize themselves and others in terms of their group memberships, they also self-stereotype, defining themselves as interchangeable with other ingroup members. This perception of the self as a member of the group can therefore act to regulate individuals’

social behaviour, so that they act in terms of shared needs, goals and norms that exemplify the group (Brown & Turner, 1981, as cited in Haslam, 2001). An individual's perceptions and treatment of other people is dependent upon whether they are an ingroup or outgroup member, in that individuals who categorize themselves in different groups will show a preference for their own group, as well as discriminate against the outgroup (Gaertner, Mann, Murrell, & Dovidio, 1989; Nier, Gaertner, Dovidio, Banker, Ward, & Rust, 2001).

Shared ingroup membership has been found to facilitate arousal of empathy (Hornstein, 1976), prosocial behaviour (Piliavin, Dovidio, Gaertner & Clark, 1981), and cooperation (Kramer & Brewer, 1984). A way to think of this is that the concept of "value" is inherently tied to the concept of "self" (Sherif, 1936; Turner, 1987), and SCT suggests that valuing oneself or others as positive or negative is equivalent to evaluating the degree to which they are "self" or "not self" at some higher level of abstraction. Interestingly, however, the delineation of group memberships is not concrete, as individuals can be re-categorized along other dimensions (e.g., an individual might be Canadian at one moment, but then their identity based on gender becomes salient in the next), or groups might be viewed as one more encompassing group, in which members of the previously separate groups conceive of themselves as belonging to a common superordinate category, inclusive of former ingroup and outgroup members (e.g., Canadians and Americans both become North Americans). This knowledge may be put to good use in group-based youth programs, where individuals from stereotypically different social categories may be brought together to think of themselves as one group.

In so doing, the value of others is equated, as all individuals come to reflect a common dimension of the self.

The creation of a superordinate group is achieved most easily through introducing a superordinate goal, or a goal only attainable through the equitable, cooperative efforts of all groups acting together. The classic study demonstrating that self-categorization could effect personal behaviour change was the Sherif and Sherif (1956) Robber's Cave Experiment in Oklahoma, in which they brought two groups of boys together at a summer camp. The two groups, the self-dubbed Rattlers and the Eagles, were created by assigning boys to the groups randomly, but in such a way as to break up friendship pairs. The groups were then placed in competitive situations that ultimately resulted in bitter intergroup competition and hostility. At the end of two weeks, the experimenters attempted to bring the groups together in peace by introducing non-competitive activities such as watching movies and eating together in the lunch hall. These measures did not work to bring the groups together, as the two groups stayed separated, jeered at each other, or engaged in food fights. The only strategy that was effective to bring the groups together was to create a situation in which cooperation between, and equitable participation from, the groups was necessary to achieve shared goals. A series of urgent problems was devised which the boys could only solve by working together (e.g., the camp's water supply was cut and the boys had to search for a leak across 1.6 km of pipe. On another occasion, they had to work together to start a truck that had broken down). After achieving these superordinate goals, which required cooperation from everybody to surmount, the boys had become reconciled and even asked to go back to the city on the same bus (Sherif & Sherif, 1956).

As seen in the Sherif and Sherif (1956) study, re-categorization into a superordinate group significantly reduced negative intergroup attitudes and behaviours, as the superordinate identity made salient a broader definition of self that encompassed all of the boys. This shift in identity increased the perceived attractiveness and sameness of former outgroup members by redefining them as members of the same ingroup.

Since the Sherif and Sherif study, the benefits of recategorization have consistently been demonstrated to produce more positive evaluations and perceptions of shared beliefs and values, to reduce discrimination, to enhance memory for positive information about others, and to reduce blame for an accident or other negative outcomes (e.g., Gaertner, Rust, Dovidio, Bachman & Anastasio, 1994; Nier et al., 2001). For example, in a survey study in a multi-ethnic high school, Gaertner et al. (1994, 1996) noted that students who perceived the student body as 'one group' or 'different groups who are playing on the same team' were more likely to display positive affect toward other ethnic groups. Thus, the presence of a superordinate identity (i.e., 'our school') in the context of a multi-ethnic sample was related to more positive affective reactions to students of different ethnicities (Gaertner et al., 1994, 1996). Finally, the salience of an even broader superordinate identity among ethnic minority students (e.g., identity as an American, although at the same time maintaining their ethnic group identities) was related to higher levels of positive affect toward other ethnic groups (Gaertner et al., 1994, 1996).

Carefully planned group-based youth programs, which bring together a broad diversity of youth with shared goals may actually employ aspects of the processes delineated by SCT (Turner, 1987), allowing youth to think of themselves in terms of all

three levels of self-categorization (e.g., self, social, and human identity). At the individual level, youth identify personal contributions and skills. At the social and human identity levels, they learn to identify with a broad diversity of individuals that they may not associate with in school and community contexts. By removing the “us” and “them” categories, a foundation is laid to understand both their own, as well as others’, circumstances, and an appreciation for others may be fostered.

### The Present Study

The present study was an evaluation of The Young Canadian Leadership Challenge®, an adventure program located in the Ottawa area. Although there has been substantial research assessing the outcomes of such programs, this study further attempted to identify mechanisms that might be operating to achieve program goals. In particular, this study examined two parallel processes deemed by previous research to be central to positive outcomes, namely, the factors associated with the development of initiative and of bridging differences among youth.

#### *Description of Program*

The Young Canadian Leadership Challenge® is a weekend-long, role-playing game in which adolescents, both boys and girls between the ages of 10 to 19, are divided into teams and are given within-team as well as between-team challenges that require input and cooperation from all team members, or all teams, respectively. The program is run by adult volunteers (who do not necessarily have previous experience in program implementation) who follow the direction of three or four program leaders. Program leaders are previous program volunteers who have demonstrated their ability to effectively facilitate experiential learning. The program is intended as a medium in which

adolescents, within an experiential learning context bolstered by therapeutic discussion and debriefing, may discover “strengths” (Peterson & Seligman, 2001) within themselves that they may then apply outside of the program.

Although it has expanded to include both boys and girls, YCLC was originally created as the Young Men’s Leadership Weekend, inspired to prevent and reverse the trend towards the largely male issue of youth violence. Despite this expansion, the program still follows the idea that, when provided with the right opportunity, bullies will assume positive leadership and adolescents will substitute initiative for victimization. The core outcomes of the program as envisioned by its designers are development of initiative, self-respect, appreciation for peers, and self-authenticity. Program designers, parents, and participants have testified that these effects are apparent six months after the program, and indefinitely after that (Leaders of Tomorrow Institute, n.d.).

Participants are kept in “flow” (Csikszentmihalyi & Larson, 1984) for the entire weekend by either partaking in challenges, or articulating what they have learned from the challenges. Furthermore, mental challenges are given during meals so that conversation does not wander to learning-negative topics (e.g., gossip or destructive criticism). Activities such as storytelling and ceremonial initiation at the end of the day, which is an invitation to the youth to articulate what they have discovered and to speculate openly about what it would take to own it in their lives, are used to keep the program moving throughout the weekend.

*Program sequence.* Volunteers arrive on Friday evening, three hours before the arrival of adolescents. In some cases, volunteers are parents of participants, however, parents are not assigned to facilitate groups in which their children participate so as not to

recreate old patterns of interaction. Volunteers are trained by attending a short lecture on facilitating discovery learning by the program designer, watching a summary video of previous program activities, and playing a theatrical role-playing game. They are encouraged not to intervene in the youths' activities, except in circumstances where safety is an issue.

The actual event begins late Friday evening, and the mythical theme for the program is explained to participants. This theme is intended to engage participants' interest, and to create a situation open-ended enough that roles can be created by participants and not imposed by the scenario itself. To date, a basic combination of the 14<sup>th</sup> century Knights Templar and J.R.R. Tolkien's Lord of the Rings storylines has been used. Participants are asked to exchange their everyday identities for mythical identities that they adopt for the program's duration. Elders (adult volunteers) establish the myth and divide participants into groups of 8 – 12 members. After this, each group builds its own campsite and creates an identifying team banner. In sum, Friday night sets the stage for activities that will happen during the rest of the weekend.

On Saturday, using the technique of "simulation gaming" (originally an executive training method used to make learning interactive), youth are again invited to stay in their mythical roles and are told they will spend the weekend earning the pieces to a giant jigsaw puzzle in order to locate a treasure. These puzzle pieces are earned by successfully completing cooperative group challenges. Groups are given problem-scenarios posed as physical "puzzles" (e.g., how to get your entire team from one platform to another, by using only a hanging rope which is beyond arms length from either side), and the solution requires participants to both plan among themselves, as well as to realistically assess their

own individual strengths and weaknesses. Participants must then physically surmount each challenge, acting as a group.

After each challenge, participants debrief within their groups, encouraged by adult volunteers to discuss what worked for them, or what contributions from individual members and aspects of group cooperation were able to help them overcome the challenge. It is believed that participants discover different strengths within themselves, strategies of relating to each other, and an appreciation for what other group members contribute.

After the within-group discussion, participants summarize what they learned from overcoming the challenge, both individually and as a group, to a “high council”, a small group of adults who question and challenge the youth to articulate their thoughts. Groups who provide a convincing case for the high council receive “icons”, or puzzle pieces. Individuals who show exemplary participation (e.g., outstanding cooperation or bravery) are awarded “beads”. These beads are intended to strengthen a positive prototype within each group, and encourage self-identification with the group as well.

As participants practice this process of participating in challenge, and group discussion and articulation of what they have learned, they are being taught to develop a “heroic identity” by reflecting on their positive, “heroic” behaviour when overcoming the challenges. This heroic identity probably reflects a prototype of positive group norms the program attempts to foster (i.e., bravery, leadership, curiosity, responsibility, creativity, etc.).

On Saturday night, participants each have a chance to speak to the entire group at campfire. An adult volunteer asks the question, “What would you like to give up in order

to be an even more contributory participant tomorrow?" This elicits sharing of personal issues, battles, and stressors. Participants hold a heavy stone symbolic of the "burden" or stressor they would like to give up, and cast it down after they have revealed what it is and why they would like to give it up to the group.

The following day, a new sequence of even more difficult challenges is presented, again requiring cooperation within the groups. The challenges presented are more difficult as it is assumed that the problem solving skills of the group have increased, and further challenge must be issued to keep them engaged and in flow. The program ends on this day, and the final activity is what program creators call a "galvanizing event", bringing together all participants by combining the small groups with a superordinate goal, or activity that unites everyone in a shared community challenge. The activity is the reconstruction of a bridge over a small stream on the property (which, before the program, is taken apart by adult volunteers, leaving only the main supports on which to build). The bridge is a metaphor for what separates the youth from the outside world and everyone, including elders, participates in its rebuilding. Participants act as a superordinate group to achieve a major accomplishment that they come to view as possible through using all resources and all people.

The program ends with a ceremony, in which each participant speaks about how he or she will put the most meaningful virtues or strengths they have identified within themselves to practice in their daily lives. Each also speaks about his or her heroic identity, a new identity that is both personal, in that it reflects individual values, and social as it also reflects the small groups that helped to shape these values, or catalyze their realization. Adult volunteers then ask participants to choose an area in their home

community in which they are interested, devote two days of community service to this area, and report back to adult volunteers.

### *Hypotheses*

The program that was evaluated is typical of adventure programs, in that it provides physically and mentally challenging objectives in a small-group setting, as well as a debriefing to process what is learned in the challenges. Thus, to identify the processes linked with their successful outcomes, this study assessed the experiences youth reported within the program related to initiative and bridging differences, as well as the attitudes and behaviours the program directly aimed to improve. The present study tested the following hypotheses:

- 1) Program participants would develop a more positive self-concept. This would be reflected in more positive self-ratings along dimensions fostered by the program at posttest compared with pretest. This positive self-conception would be maintained at follow-up, and would be higher in program participants than in a comparable sample of youth who did not participate in the YCLC.
- 2) Youth would report a greater sense of similarity to a diverse set of other youth and more positive interpersonal interactions at posttest, and these would be maintained at follow-up, and be greater than in a comparison group.
- 3) Reporting greater interaction with diverse peers within the program would be predictive of the extent to which youth perceived similarity to other diverse youth at posttest and follow-up. Importantly, to the extent that a sense of social identification with other groups is a core process that imparts a set of norms that

- positively reflect on the youth, the extent to which they perceived similarity with other youth would predict the extent of positive change in their self-concept.
- 4) Program youth would report more experiences of initiative, in terms of goal setting, problem-solving, effort, and time management than would the comparison group of youth.
  - 5) Compared with pretest ratings, at follow-up participants were expected to show greater initiation, better concentration, more control over, and better time management in their personal project pursuits. In addition, these ratings would be higher in the youth taking part in the YCLC than for the comparison group.
  - 6) Program participants' perceptions of initiative experiences would be predictive of their project ratings at follow-up, in that experiences of setting goals, effort and perseverance, problem solving and managing time would be associated with higher project ratings of initiation, concentration, control, and time management.

## Method

### *Design*

This study was a pretest, posttest and 3-month follow-up study assessing the effectiveness of two sessions of the YCLC program. In addition, program participants' responses at follow-up were compared with those of a comparison group to determine whether any changes following the program resulted in differences between youth who participated and those who did not.

### *Participants*

The program sample consisted of two groups of youths who participated in the YCLC ( $n=44$ ), one of which ran from September 3 – 5, 2004, and the other of which ran from February 4 – 6, 2005. For the September session, 34 participants attended the program, however, two participants left on the first day due to illness, and one participant did not complete the pretest or posttest, and hence were not included in any of the analyses. A further eight participants declined to participate in the follow-up study; their responses were estimated from their pretest scores, adding the mean difference of completers' scores between posttest to follow-up so as not to positively bias results (see further explanation in Results). For the February session, 13 participants (all female) attended the program and all participated at all three measurement times.

Ages of program participants ranged from 10 to 18 ( $M = 13.10$ ,  $SD = 2.22$ ). Of the total program sample whose responses were analyzed ( $n=44$ ), roughly a quarter ( $n=14$ , 31.8%) were male and 30 (68.2%) were female. The majority of participants identified themselves as Caucasian ( $n= 30$ , 68.2 %), but the sample was fairly ethnically diverse, in that 10 (22.7%) participants self-identified as African, two (4.5%) as Asian, one as South Asian (2.3%), and one (2.3%) as both Caucasian and First Nations. Most of the participants were born in Canada ( $n=32$ , 72.7%), but eight (18.2%) had immigrated to Canada within the last five years, and a further four (9.1%) had immigrated between six and 11 years ago.

The comparison sample ( $n=42$ ) was recruited from five community and private youth structured voluntary activity groups in the Ottawa area, including four drama groups and one after-school community program. Volunteers were sought by approaching various community center activity groups and after-school programs, as well

as through personal contacts of the author. Comparison participants were selected in an attempt to roughly match program participants on age and sex. Ages of comparison participants ranged from 10 to 17 ( $M = 13.05$ ,  $SD = 1.95$ ). Roughly a quarter ( $n=11$ , 26.2%) were male and 31 (73.8%) were female.

Of those participants in the comparison group who provided ethnic status, the majority ( $n=28$ , 66.7%) identified themselves as Caucasian, two (4.8%) as Asian, two (4.8%) as First Nations, one (2.4%) as South Asian, one (2.4%) as African, one (2.4%) as Brazilian. Most ( $n=37$ , 88.1%) were born in Canada, while two (4.8%) immigrated within the last five years, and two (4.8%) immigrated between six and 11 years ago. All participants indicated they could comprehend and write English well enough to complete the questionnaire package in English, although seven (16.7%) indicated another first language (one of Chinese, French, Italian or Portuguese).

### *Procedures*

*Program participants.* Parents of YCLC participants were informed of the study through the program facilitator, who sent parents an informed consent (Appendix A) along with other program forms through email. Parents or youth returned the form upon registering at the program. Prior to beginning the questionnaires, youth were verbally told the purpose of the study and what it involved, and then signed a written informed consent (Appendix B). An alternate activity – writing about summer vacation – was available for youth who did not receive parental consent or did not wish to participate; however, all program participants chose to partake.

Respondents were tested on three occasions: at the outset of the program on the Friday night of their arrival, upon completion of the program just before departure

(Sunday afternoon), and they were contacted for follow-up 3-4 months after program completion. Although ideally the pretest could have been administered prior to arrival, it was conducted onsite for several reasons: (a) the logistics of administering the questionnaire package ahead of time were virtually impossible as many participants registered only a few days (sometimes only one day) before the program commenced, and (b) there were methodological and ethical concerns about mailing out a take-home test, including parental consent, low response rate, no researcher present to answer questions, and lack of confidentiality of responses from parents. This said, administration of the pre-measures on-site may have also presented some problems, including *prior effects*, that is, misleading pretest scores due to participant anxiety, anticipation, excitement or fear of confronting something different and challenging. For example, anticipation could decrease confidence in oneself, heighten anxiety, decrease perceptions of interpersonal skills, lower efficacy of leadership skills, and reduce estimations of coping skills. However, Hattie et al. (1997) found, across many studies, little or no systematic prior effects across participants of diverse ages, gender, and ethnic backgrounds. These findings, combined with the logistical, methodological and ethical concerns of sending a package home to participants, provided support for the conduct of an onsite pretest.

For the pretest, a nearby off-site town meeting center (in September) and the program facility conference room (in February) were used for group testing sessions. The questionnaire package took approximately 30 minutes, and could be completed in either English ( $n=30$ , 68.2%) or French ( $n=14$ , 31.8%). Participants were not debriefed until after the posttest, as the contents of the questionnaire were not considered to be

distressing, and, importantly, explicit information about the study might have compromised honest responses at posttest.

At posttest, all participants were tested in a conference room on-site. They were again informed of the purpose of the study and completed a shorter (10 minute) questionnaire package, containing several of the pretest measures, as well as a survey asking participants to report on experiences within the program. Upon completion, youth were thanked and debriefed. They were also reminded that they would be telephoned in about three months and they could decide at that time whether they would be willing to participate in a final survey.

At follow-up, participants were telephoned and with verbal consent from participants and their parents (if under age 18), a time to meet and complete the survey was scheduled at a local community centre, restaurant or the participant's home. Participants once again signed an informed consent (Appendix M), and completed a questionnaire taking about 45 minutes that included identical measures to the pre-test plus a qualitative component which allowed participants to give their own thoughts on the program (Appendix L). They were then given a final debriefing (Appendix N).

*Comparison group.* The comparison group was administered a questionnaire package that included all measures completed by the program participants at pretest and follow-up (see Appendixes O - S for informed consent forms and debriefing). Comparison participants were tested throughout January to April, corresponding to times when the September and February program groups were followed-up. In order to evaluate whether a follow-up of the comparison group was also necessary, respondents' scores were compared with those of program participants at pretest (see Table 6, Results). Given

the equivalence of program participants' responses at pretest and those of the comparison group on variables on which change was expected, it was decided that it was unnecessary to follow-up the comparison group. In effect, given a lack of differences at pre-test, along with the parallel timing of following up the program participants and testing of the comparison group, any subsequent differences between the comparison group and YCLC participants at post-test or follow-up were likely attributable to the program.

### *Measures*

Both the pretest and follow-up sessions (Appendix G - K) included a demographic information sheet (grade, gender, age, language proficiency, years lived in Canada, and race), an adaptation of the Inclusion of Other in the Self Scale (IOS; Aron, Aron & Smollan, 1992), a measure of self-concept (Me or Not Me: derived from the work of Sani & Bennett, 2004), and a personal projects analyses kit, (Hopton, 1999, modified from Little, 1983). The posttest included the same measures (excluding the personal projects kit) with the addition of the Youth Experiences Survey (Hansen & Larson, 2005) to assess youths' self-reported experiences within the program. At follow-up, an additional qualitative questionnaire, designed by the author, was given in order to provide program participants with the opportunity to express their own feelings and opinions in their own words.

*Me or Not Me (adapted from Sani & Bennett, 2004; Appendix H).* Whether participants had incorporated a positive conception of self as a result of the program was measured using a scale designed for the present study. The scale comprised 24 items, including eight adjectives taken from the Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988), and another 16 items representing positive descriptors such as

'a hero', 'brave', 'loyal', 'a good team member', 'someone who can be trusted', 'someone who includes others in the fun', and 'a leader'. These descriptors were chosen in collaboration with the program designer to represent the qualities the program targeted. In response to the question, "How much does the word on the left describe you?", participants rated each item on a scale of 1 (Not Me) to 5 (Always Me).

Responses to the 24 items in the premeasure were subjected to a principal components analysis with varimax rotation<sup>3</sup>. It should be noted that although the sample size completing this measure was small ( $N=79$ ), a Monte Carlo study by Guadagnoli and Velicer (1988), indicated that components with four or more loadings above .6 in absolute value may be deemed reliable.

Examination of the scree plot indicated that a three-factor solution was most appropriate, explaining 41.1% of the total variance. Moreover, all three of these factors had at least 3 items with factor loadings equal to or exceeding .60. Using a cut-off score of .40 for minimal factor loadings, the first factor, labeled *other-orientation*, accounted for 16.34% of the variance, and represented a concern for others and thoughts about one's positive qualities as they affect others (e.g., "a good team member", "someone who can be trusted", and "responsible"). The second factor, labeled *self-orientation*, accounted for 13.38% of the variance, and reflected beliefs about positive qualities concerning the individual (e.g., "a hero", "excited", "a leader" and "creative"). Finally, the third factor, accounting for 10.93% of the variance, was labeled *negative affect*, and was comprised of items representing negative affect taken from the PANAS (Watson et al., 1988),

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<sup>3</sup> Tabachnick and Fidell (2001) suggest that the best way to determine usage of either orthogonal or oblique rotation is to request oblique rotation with the desired number of factors and examine the correlations among them. Correlations equal to or exceeding .32 (10% or greater overlap in variance among factors)

including “frustrated”, “lonely”, “afraid”, and “sad”. As seen in Table 1, subscale reliabilities (Cronbach’s  $\alpha$ ) for the factors reflecting other- and self-orientations were acceptable (all  $\geq .70$ ). Pretest and follow-up reliabilities for the negative affect factor were acceptable ( $\geq .70$ ), however, the posttest measure showed poor internal consistency (Cronbach’s  $\alpha = .38$ ), although the reason for this is unclear.

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warrant the use of oblique rotations. In the present analysis, direct oblimin rotation was employed and correlations between factors did not exceed .22, deeming the appropriateness of varimax rotation.

Table 1

*Me or Not Me Dimension Scale Items and Rotated Factor Loadings.*

	Rotated factor loadings		
	1	2	3
<b>Other-orientation</b>			
Curious	<b>.63</b>	.10	.41
Caring	<b>.60</b>	.17	.24
Loyal	<b>.59</b>	.07	.31
Honest	<b>.57</b>	-.23	-.31
A good team member	<b>.76</b>	.08	-.04
Someone who can be trusted	<b>.74</b>	.04	.02
Wise	<b>.51</b>	.37	-.01
Responsible	<b>.70</b>	.12	-.05
<b>Self-orientation</b>			
Brave	.29	<b>.43</b>	-.33
A hero	.03	<b>.64</b>	-.11
Happy	.14	<b>.57</b>	-.19
Someone who explains my ideas well	.24	<b>.50</b>	.13
A leader	.14	<b>.63</b>	-.07
Creative	.13	<b>.52</b>	.03
Proud	.01	<b>.53</b>	-.10
Excited	-.21	<b>.60</b>	.32
<b>Negative Affect</b>			
Frustrated	.16	-.19	<b>.57</b>
Lonely	.02	-.17	<b>.76</b>
Afraid	.11	.10	<b>.64</b>
Sad	-.05	-.37	<b>.64</b>
Variance accounted for (%) – Rotated	16.34	13.38	10.93
Variance accounted for (%) – Unrotated	19.69	12.86	8.10
Internal Consistency (Cronbach's $\alpha$ )			
Pretest	.80 ( $n=76$ )	.70 ( $n=76$ )	.67 ( $n=76$ )
Posttest	.84 ( $n=38$ )	.70 ( $n=38$ )	.38 ( $n=37$ )
Follow-up	.70 ( $n=38$ )	.73 ( $n=40$ )	.70 ( $n=40$ )

*Inclusion of Other in the Self Scale* (Aron et al., 1992; Appendix I). This pictorial measure was adapted for the present study to assess self-categorization to determine whether youth self-categorized at the superordinate (human) level following the program. Adapted by several researchers for use with groups (e.g., Coats, Smith, Claypool & Banner, 2000; Schubert & Otten, 2002; Smith & Henry, 1996; Tropp & Wright, 2001), the scale captures the degree of interconnectedness between self and another individual, self and an ingroup, or self and an outgroup. In other words, the scale taps into the extent to which participants include human diversity in their conception of self. The authors point out the benefits of using the IOS Scale as they argue it is readily comprehended by children, and can easily be adapted to new contexts. Several studies show face and convergent validity of the overlap items labeled as “self” and “ingroup” with established measures assessing dimensions of group identification and liking (Coats et al., 2000; Schubert & Otten, 2002; Tropp & Wright, 2001). Tropp and Wright (2001) also noted that the IOS Scale is a robust measure with respect to alterations in wording.

For the present study, a five-point Likert-type version of the scale was created. For each item, participants were instructed that there were five pictures to choose from (the response scale usually consists of seven increasingly overlapping sets of circles, however, we removed two intermediate sets to simplify it for youth). In answer to the question, “Please choose the picture that is most like how you feel about....” participants were instructed to draw an “X” on the picture that represented most closely how they felt about a particular person or group. The seven items reflected the nature of diversity they were likely to encounter during the program, namely inclusion of program youth, youth

with different clothing styles, different accents, youth of lower socioeconomic status, bullied youth, youth who bully, and youth with a different skin colour.

Responses to the seven items on the IOS on the premeasure ( $n=80$ ) were subjected to a principal components analysis with varimax rotation. Again, varimax rotation was deemed appropriate as a direct oblimin procedure indicated that correlation between components was only .15, much less than the cut-off of .32 suggested by Tabachnick and Fidell (2001). Examination of eigenvalues and the scree plot indicated that a two-factor solution was most appropriate, explaining 62.5% of the total variance.

Table 2

*Inclusion of Other in the Self Dimension Scale Items and Rotated Factor Loadings.*

	Rotated Factor Loadings	
Please choose the picture that is most like how you feel about:	1	2
The other youth in this activity	.63	-.34
A person who wears a totally different style of clothes than you do	.81	.16
A youth who has an accent that is different from your own	.83	.19
A youth whose family has a lot less money than yours does	.79	.16
A youth whose skin is a different colour than yours	.78	.30
A youth who gets bullied and teased	.33	.55
A youth who bullies and teases other kids	.01	.84
Variance accounted for (%) – Rotated	43.88	18.58
Variance accounted for (%) – Unrotated	46.74	15.71
Internal Consistency (Cronbach's $\alpha$ ; $n$ ) <sup>4</sup>		
Pretest	.84 (n=82)	.20 (n=82)
Posttest	.92 (n=40)	.12 (n=40)
Follow-up	.76 (n=40)	.10 (n=40)

<sup>4</sup> For the second factor, correlations between the two factor loadings were examined.

Using a cut-off score of .40 for minimal factor loadings, the first factor, labeled *inclusion of diversity*, accounted for 43.9% of the variance. Subsuming the majority of scale items (see Table 2), this factor represented self-perceptions of the degree of interconnectedness between self and multiple types of other people in general. The second factor, labeled *bullying*, accounted for 18.9% of the variance. As opposed to reflecting inclusion or appreciation of diversity, this factor likely reflected self-conceptions of bullying behaviour or being bullied. Moreover, this factor comprised two items, and inter-item correlations at each time point were less than .30, making it unreliable (Stevens, 2002). It was therefore dropped from further analyses.

*Youth Experiences Survey* (Hansen & Larson, 2005; Appendix J). A range of experiences in the program, including initiative experiences, were surveyed using relevant subscales from Hansen and Larson's (2005) measure. This measure was designed to survey high-school aged adolescents about their positive and negative developmental experiences in extracurricular activities or community-based youth programs. The scale was originally constructed from youths' first hand reports from focus groups on their experiences, knowledge from the literature, and input from adult experts, and validated on a sample of 450 high school students (Hansen et al., 2003). Hansen and Larson (2005) noted that their survey did not test whether learning actually occurred within a program or activity, only whether youth reported experiences that were related to its occurrence. Despite this, good convergent validity has been demonstrated between self-ratings of adolescents in youth programs and matched adult leaders who supervised the youth, indicating that students and leaders were in agreement about the

types of developmental experiences occurring within these programs (Hansen & Larson, 2005).

Program participants were provided with the instruction “Please rate whether you have had the following experiences during this weekend at The Young Canadian Leadership Challenge” on a scale from 1 (“not at all”) to 4 (“yes, totally”). Similarly, comparison participants rated their experiences within the context of the programs from which they were recruited for the present study. Hansen and Larson (2005) encourage users of their measure to employ only relevant domains, but to keep subscales intact as there are a small numbers of items within each. For the current evaluation, one subscale of personal development (Initiative) and one subscale of interpersonal development (diverse peer relationships) were included. Hansen and Larson’s (2005) YES also includes five subscales that deal with different types of negative experiences, however, only a few of these items were relevant for the present study and only these were retained.

Within Initiative, there are four domains: “Goal setting” (e.g., “I set goals for myself during this activity”), “Effort” (e.g., “I put all my energy into the challenges at YCLC”), “Problem solving” (e.g. “Used my imagination to solve a problem”), and “Time management” (e.g., “Learned about setting priorities”). Diverse Peer Relationships was defined unidimensionally, and included four items, such as “Got to know someone from a different culture” and “Learned I had a lot in common with people from different backgrounds”. Finally, Negative Experiences included items reflecting negative peer influences (e.g., felt pressured by peers to do something I didn’t want to do”), social

exclusion (e.g., "I felt left out"), and negative emotions (e.g., "This activity has stressed me out"). Subscale internal reliabilities are given in Table 3.

Table 3

*Inter-item Reliability Coefficients (Cronbach's alpha) for Subscales of the Youth Experiences Survey*

	N	Number of items	Cronbach's $\alpha$
Initiative Experiences	70	12	.89
Goal Setting	74	3	.72
Effort	76	3	.78
Problem Solving	74	3	.74
Managing Time	75	3	.71
Diverse Peer Relationships	71	4	.78
Negative Experiences	63	8	.84

*Personal Projects Analysis (PPA; Hopton, 1999, adapted from Little, 1983; Appendix K).* PPA was selected as the most viable way to examine initiative in youths' daily lives, as it provides information about what youth are doing, how they feel about what they are doing, and whether they feel responsible for having initiated their projects. Easily adapted for pre-post assessment, personal projects are designed to explore cognitive, affective and behavioural aspects of how individuals attempt to get what they want or do what they must do in their current life contexts (Little, 1989, 1990; Pychyl & Little, 1998). Projects can range from everyday and routine activities ("clean my room") to long-term goals ("become a doctor").

It has been suggested that PPA is appropriate for cross-cultural assessment, which is important due to the ethnically diverse nature of the sample of youth in this program (Hopton, 1999; Little, 1989). PPA also provides the flexibility needed to assess specialized groups, as the researcher may select and modify the traditional PPA module, or develop additional aspects to suit particular assessment needs. Participants were asked to complete parts of a Personal Projects Analysis package as adapted by Hopton (1999) to address the unique concerns of youth. Several changes were made to both the content and format of the standard PPA kit, including rewording several dimensions to facilitate comprehension for youth. Several PPA dimensions relating to initiative were altered for this purpose: 'Absorption' was converted to 'Concentration'; 'Initiation' to 'Your Idea'; and 'Self Identity' to 'Like You'. The rating questions were expanded and reworded, and an 11-point scale was presented with pictures to make the process more engaging for youth. The PPA module used in the present study consisted of two stages. The first stage began by asking participants to list all the personal projects in which they were currently involved or in which they were going to be involved in the near future. Examples of several projects were provided to demonstrate the broad array of possible projects. The second stage asked participants to select, from the list they had generated, the four projects most important to them. The usual number of projects rated is ten, however, this was shortened to four in order for youth to be able to complete this in the restricted time frame available for testing. Previous research has found four projects acceptable for analyses of project dimensions (Gee, 1999). Participants were then asked to rate these projects from 0 to 10 (with 0 being "not at all" and 10 being "very much so") on five dimensions. These dimensions were chosen to reflect both initiative dispositions and

initiative-facilitating aspects of the project, including control, initiation (“your idea”), self-identity (“like you”), time adequacy (“time”), and absorption (“concentrated”)<sup>5</sup>. For each dimension, participants were given a short definition, and were then asked to rate their four chosen projects on this dimension. In order to make the process easier for youth, all measures were bound into a booklet, with a fold-out flap at the back on which participants copy their list of four projects. This flap ensured that the projects were always visible as participants completed the dimensions. In terms of scoring, the mean of a participant’s four projects on a particular dimension was calculated as their score for that dimension<sup>6</sup>.

*Qualitative Questionnaire (Appendix L).* In order to provide program participants with the opportunity to put their feelings and opinions regarding their perceptions of their experiences in the program in their own words, a short open-ended questionnaire was given at follow-up. This included six open-ended questions, including: 1) Why participants decided to attend the program (prior to answering this open-ended question, they were given four closed-ended possibilities), 2) generally, what they felt they had learned (if anything) 3) perceptions of whether they had gained greater initiative (framed as being more excited about one’s activities and being better able to finish them) 4) whether they felt they had changed since the weekend 5) exposure to diversity within the program, and finally 6) what they would have changed about the weekend (if anything). To facilitate the development of a coding schema, a list of all possible responses given by participants was made corresponding to each of the six questions. The author then

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<sup>5</sup> From this point forward, project dimensions are referred to as control, initiation, self-identity, time management and concentration, for the sake of clarity.

developed a set of mutually exclusive categories based on themes that emerged from participants' responses. The coding unit of analyses was a theme, and participants were not limited to responding according to one category (i.e., they could respond with several answers or themes and be coded into several categories). Two coders (the author and another graduate student) then met to discuss the meaningfulness of categories and to train the second coder. Sample responses were examined by both coders, and modifications to the coding schema were made to categories that appeared to be vague, overlapping, or absent. Once the coding categories were refined, the entire sample of participant responses was coded separately by each coder and an intercoder reliability coefficient was calculated for each question. Krippendorf's  $\alpha$  was selected as the index of intercoder reliability, as this estimate corrects for chance agreement between coders, is applicable to any number of values (categories) per variable, is unbiased with use for small and large sample sizes alike, corrects for varying amounts of reliability data, and is applicable to data with missing values due to one or the other coders not attending to all coding units (Krippendorf, 2004). As Krippendorf's  $\alpha$  is a conservative coefficient, .80 was chosen as the minimum acceptable level of intercoder reliability. The coding scheme used, along with the number of coding units in each category and intercoder reliabilities are presented in Appendix T.

## Results

### *Analytic Approach*

Hattie et al. (1997) point out that the major interest for evaluators of adventure programs relates to the magnitude of change, and this has often been incorrectly

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<sup>6</sup> It is usually standard for a principal components analysis to be conducted on project dimension ratings, however, given the very small number of dimensions and small sample size, each dimension was treated as

expressed in terms of statistical significance. Interpreting only traditionally “statistically significant” findings ignores the major issue of the power of the study and renders meaningful relations nonsignificant. Hence, given the small sample size, although significance tests were attended to, the magnitudes of the effect sizes were also considered. Specifically, effect sizes  $R^2$  or  $\eta^2$  that indicated accounting for at least 5% of the variability were interpreted and further pursued. This choice was made based on Hemphill (2003), who found that correlations ranging from .2 to .3 were in the middle third of the distribution of coefficients of 380 assessment and treatment studies included in meta-analytic reviews; they therefore suggested that corresponding effect sizes of this magnitude be considered in the ‘medium’ range, and hence meaningful. As well, Stevens (2002) suggests adopting a more lenient  $\alpha$  level when sample sizes reach as low as 20 subjects per group. Based on Stevens (2002) suggestion, if an effect size exceeded 5%, an alpha level of .10 was adopted as the criteria for significance in the current thesis.

In analyses involving repeated measures, the Huynh-Feldt statistic was used to contend with violations of the assumption of sphericity because it is less conservative than the Greenhouse-Geisser estimator (Maxwell & Delaney, 1990). Bonferroni’s correction was used to keep the familywise  $\alpha$  at .10 for multiple post hoc comparisons, given the already liberal criteria being used to detect meaningful effects. No changes, removal of cases or outliers, or transformations were made on the data resulting from checks of assumptions for statistical tests (Appendix U).

### *Initial Analyses*

*Participants who took part in follow-up vs. those who did not.* In order to evaluate whether there were differences between participants who did versus did not complete the

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its own theoretical aspect of initiative.

follow-up, a series of independent t-tests or Chi-Square analyses, where relevant, were conducted. These analyses indicated that respondents who participated at follow-up differed significantly from those who did not on several demographic variables. As seen in Table 4, participants who did not participate in the follow-up were more likely to be male ( $\chi^2=4.23, p<.05$ ), and none was a member of a visible minority group ( $\chi^2=4.10, p<.05$ ). Although there were no differences between these groups on any of the measures at pretest, at posttest those who did not complete the follow-up reported significantly lower effort (based on the YES) within the program. Further, although not significant, the effect sizes for differences between participants who were not followed-up, suggested lower experiences of other aspects of initiative, and higher negative experiences within the program. Given these differences, there may have been some self-selection bias concerning participants who were followed-up, in that these may very well have been the program participants who were less satisfied or affected by their experiences in the program. Thus, to ensure that assessment of the program effects was not biased by excluding these participants (as would typically happen in a repeated-measures analysis, i.e., participants with missing values are eliminated from the analysis), the follow-up scores of these eight youth were estimated from posttest means<sup>7</sup>. Specifically, mean differences between posttest and follow-up were computed for participants who were followed-up on each variable of interest separately. The mean of these difference scores was then added (or subtracted, where negative) from the posttest scores of noncompleters and these values were used as estimates of follow-up scores. Follow-up scores were calculated in this way so as not to positively bias effects that would have been evident if

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<sup>7</sup> Personal projects dimensions at follow-up for non-completers were based on differences from pretest means as PPA was not conducted at posttest.

scores had simply been extrapolated from post-test (as posttest means could be inflated due to several methodological artifacts, see Hattie et al., 1997).

Table 4

*Descriptive Statistics (n, %, Mean, SD) for participants who were vs. were not followed up.*

	No follow-up 8 (18.2%)	Follow-up 36 (81.8%)	$\eta^2$
Sex			
Male	5 (62.5%) <sup>a</sup>	9 (25.0%) <sup>b</sup>	
Female	3 (37.5%)	27 (75.0%)	
Minority Status			
Visible Minority	0 (0%) <sup>a</sup>	13 (36.1%) <sup>b</sup>	
Non-minority	8 (100%)	23 (63.9%)	
	<i>M (SD)</i>	<i>M (SD)</i>	
Age	13.00 (1.79)	13.86 (2.45)	.02
Inclusion of Diversity			
(Pretest)	3.32 (1.06)	3.05 (0.97)	.01
(Posttest)	3.29 (1.24)	3.35 (0.98)	.00
Self-Concept (Pretest)			
Other-orientation	3.95 (0.42)	3.91 (0.75)	.001
Self-orientation	3.52 (0.86)	3.57 (0.62)	.001
Negative Affect	2.21 (0.69)	2.57 (0.73)	.037
Self-Concept (Posttest)			
Other-orientation	4.26 (0.45)	4.00 (0.61)	.028
Self-orientation	3.51 (0.87)	3.80 (0.57)	.030
Negative Affect	2.25 (0.85)	2.52 (0.61)	.023
PPA			
Initiative	8.45 (1.87)	8.12 (1.52)	.010
Control	7.85 (2.35)	7.77 (1.57)	.000
Self-identity	8.62 (1.72)	7.74 (1.81)	.035
Time Management	7.81 (1.54)	6.90 (1.90)	.036
Concentration	7.65 (1.61)	7.49 (1.69)	.001
YES			
Initiative experiences	2.55 (0.94)	3.17 (0.53)	.127
Goal setting	2.35 (1.21)	3.16 (0.61)	.157
Effort	2.62 (1.06) <sup>a</sup>	3.41 (0.57) <sup>b</sup>	.170 <sup>+</sup>
Problem solving	2.62 (0.76)	3.05 (0.67)	.054
Time management	2.62 (0.93)	3.01 (0.68)	.042
Diverse Peers	2.25 (1.12)	2.75 (0.83)	.044
Negative Experiences	2.59 (1.14)	1.98 (0.88)	.059

<sup>+</sup>  $p < .10$ , \* $p < .05$ , \*\* $p < .01$

Note: Columns with different superscripts differed from each other at  $p<.10$ .

*Comparison between September vs. February program participants.* Differences between participants who took part in the programs run in September ( $n=31$ ) versus February ( $n=13$ ) were also examined in order to determine whether it was appropriate to combine these groups in further analyses. Again, independent t-tests and chi-square analyses were conducted to assess these differences. As seen in Table 5, there were a number of differences between these groups, in that, the February participants were older,  $t(42)=-2.69, p<.01$ , were all female,  $\chi^2(1)=8.61, p<.01$ , and were less likely to be visible minorities ( $\chi^2=4.23, p<.05$ ). Moreover, as seen in Table 5, at pretest, February participants reported higher negative affect in relation to the self-concept, and scored lower on the project dimension assessing concentration. Further, at post-test, the February participants reported a higher frequency of initiative experiences (higher goal setting, effort, problem solving and time management) within the program, and a lower frequency of negative experiences. However, there were no differences between the groups at follow-up. Nonetheless, because the participants in the two programs differed on key demographic variables, and they seemed to report dissimilar experiences within the program (indeed, the two programs differed considerably in terms of process, see Discussion), it was concluded that combining these groups for subsequent analyses would be inappropriate. Therefore, program group (September vs. February) was included as a between-subjects variable.

Table 5

*Descriptive Characteristics for September and February Program Groups.*

Variable	September 31 (70.45%)	February 13 (29.55%)	$\eta^2$
<b>Sex</b>			
Male	14 (45.2%) <sup>a</sup>	0 (0%) <sup>b</sup>	
Female	17 (54.8%)	13 (100%)	
<b>Minority Status</b>			
Visible Minority	12 (38.7%) <sup>a</sup>	1 (7.7%) <sup>b</sup>	
Non-minority	19 (61.3%)	12 (92.3%)	
	<i>M (SD)</i>	<i>M (SD)</i>	
<b>Age</b>	13.13 (1.94) <sup>a</sup>	15.08 (2.72) <sup>b</sup>	.147 **
<b>Pretest</b>			
Inclusion of Diversity	3.21 (1.04)	2.83(0.64)	.034
Self-Concept (Me or Not Me)			
Other-orientation	3.86 (0.77)	4.06 (0.44)	.018
Self-orientation	3.65 (0.63)	3.34 (0.71)	.045
Negative Affect	2.34 (0.73) <sup>a</sup>	2.94 (0.54) <sup>b</sup>	.140 *
<b>PPA</b>			
Control	7.68 (1.85)	7.99 (1.28)	.008
Initiation (Your Idea)	8.11 (1.68)	8.14 (1.17)	.003
Self Identity (Like you)	8.20 (1.61)	7.27 (2.09)	.060
Time Management	7.18 (1.71)	6.31 (2.20)	.009
Concentration	7.88 (1.56) <sup>a</sup>	6.78 (1.65) <sup>b</sup>	.099 *
<b>Posttest</b>			
Inclusion of Diversity	3.36 (1.05)	3.28 (0.92)	.002
Self-Concept (Me or Not Me)			
Other-orientation	4.03 (0.62)	4.08 (0.52)	.001
Self-orientation	3.75 (0.62)	3.74 (0.67)	.000
Negative Affect	2.38 (0.66)	2.70 (0.61)	.053
<b>YES</b>			
Initiative Experiences	2.93 (0.66) <sup>a</sup>	3.40 (0.46) <sup>b</sup>	.115 *
Goal setting	2.88 (0.83) <sup>a</sup>	3.37 (0.42) <sup>b</sup>	.089 +
Effort	3.13 (0.76) <sup>a</sup>	3.63 (0.47) <sup>b</sup>	.100 *
Problem solving	2.86 (0.70) <sup>a</sup>	3.26 (0.63) <sup>b</sup>	.069 +
Time Management	2.80 (0.71) <sup>a</sup>	3.28 (0.66) <sup>b</sup>	.097 *
Diverse peers	2.59 (0.87)	2.85 (0.92)	.020
Negative Experiences	2.30 (0.99) <sup>a</sup>	1.57 (0.60) <sup>b</sup>	.129 *
<b>Follow-up</b>			
Inclusion of Diversity	3.42 (0.99)	3.09 (0.77)	.028

Self-Concept			
Other-orientation	4.14 (0.50)	4.04 (0.45)	.010
Self-orientation	3.52 (0.66)	3.49 (0.53)	.001
Negative Affect	2.63 (0.77)	2.65 (0.63)	.000
PPA			
Control	7.58 (1.65)	7.60 (1.80)	.000
Initiation	8.44 (1.62)	7.83 (1.59)	.029
Self-Identity	7.51 (1.74)	7.33 (1.42)	.003
Time Management	6.75 (1.82)	6.82 (1.69)	.000
Concentration	6.76 (1.98)	7.15 (1.47)	.010

<sup>+</sup> $p<.10$ , <sup>\*</sup> $p<.05$ , <sup>\*\*</sup> $p<.01$

Note: Rows with different superscripts differed from each other at least at  $p<.10$ .

Parenthetically, in comparison to normative data provided by Hansen and Larson (2005), participants' experiences within the program or comparison activities as reported on the Youth Experiences Survey were quite consistent, indicating moderately high levels of positive experiences and moderately low levels of negative experiences. Similarly, participants ratings of their personal projects were similar to results obtained in other studies for this age group<sup>8</sup> (Hopton, 1999; Wilmot, 1993).

*Differences between program and comparison groups at pretest.* Given matching efforts, program and comparison participants differed significantly on age,  $F(2,84)=4.8$ ,  $p<.05$ . Follow-up multiple comparisons with the Bonferroni correction indicated that because February participants were significantly older than September participants  $t(42)=-2.69$ ,  $p<.05$ , the February participants were significantly older than total sample of comparison participants,  $t(53)=2.98$ ,  $p<.01$ . For the same reason, program participants also differed significantly in terms of gender ( $\chi^2(2)=6.68$ ,  $p<.05$ ), as February participants were all female, and September participants were more likely to be visible minorities than the comparison group,  $\chi^2=5.73$ ,  $p<.05$  (only one of the February

participants was a visible minority, which meant that the matched comparison group as a whole would not reflect the diversity evident in the September group).

At pretest, there were was a significant difference in the extent to which participants reported being able to concentrate on their projects,  $F(2,72)=3.00, p<.10$ . Follow-up comparisons using the Bonferroni correction indicated that, as seen in Table 6, the September participants reported greater project concentration than comparison participants at pretest. As the program participants were reporting more positive ratings than the comparison group at pretest, then any positive effects of the program itself could still be attributed to the program (i.e., had the difference been in the opposite direction, if program participants indicated more positive ratings following the program, it would have been unclear as to whether these differences were a function of the program, or these youth becoming more like their comparison counterparts). Differences were not evident on the variables that we expected to be influenced by the program, namely self-concept, inclusion of diversity, and the other PPA dimensions pertaining to initiative. Thus, it was concluded that comparison program participants' scores at follow-up with those of comparison participants would provide an appropriate assessment of program impact.

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<sup>8</sup> Data from Wilmut (1993) are from a group of 115 mainly Caucasian grade seven and eight students, with a mean age of 13 years. Data from Hopton (1999) are from a group of 43 grade seven and eight students from the Akwesasne Mohawk Reserve in Ontario, with a mean age of 12.85.

Table 6

*Descriptive Characteristics (n, %, Mean, SD) for September and February Program Groups (Pretest) and Comparison Group.*

Variable	Program Groups		Comparison Group	$\eta^2$
	<u>September</u>		<u>February</u>	
	<u>n(%)</u>	<u>n(%)</u>	<u>n(%)</u>	
<b>Sex</b>				
Male	14 (45.2%)	0 (0%)	11 (26.2%)	
Female	17 (54.8%)	13 (100%)	31 (73.8%)	
<b>Minority Status</b>				
Visible Minority	12 (38.7%)	1 (7.7%)	6 (14.3%)	
Non-minority	19 (61.3%)	12 (92.3%)	36 (85.7%)	
<b>Age</b>				
Inclusion of Diversity	13.13 (1.94)	15.08 (2.72) <sup>a</sup>	13.05 (1.95) <sup>b</sup>	.109**
Self-Concept (Me or Not Me)	3.21 (1.04)	2.83(0.64) <sup>a</sup>	3.46 (0.92) <sup>b</sup>	.052*
Other-orientation	3.86 (0.77)	4.06 (0.44)	4.00 (0.58)	.015
Self-orientation	3.65 (0.63)	3.34 (0.71) <sup>a</sup>	3.72 (0.63) <sup>b</sup>	.038 <sup>+</sup>
Negative Affect	2.34 (0.73) <sup>a</sup>	2.94 (0.54)	2.78 (0.86) <sup>b</sup>	.086*
<b>PPA</b>				
Control	7.68 (1.85)	7.99 (1.28)	7.52 (1.98)	.008
Initiation	8.11 (1.68)	8.14 (1.17)	7.97 (1.54)	.002
Self-Identity	8.20 (1.61)	7.27 (2.09)	7.52 (1.99)	.036
Time Management	7.18 (1.71)	6.31 (2.20)	6.36 (2.55)	.028
Concentration	7.88 (1.56) <sup>a</sup>	6.78 (1.65)	6.82 (1.91) <sup>b</sup>	.077*

<sup>†</sup> $p < .10$ , <sup>\*</sup> $p < .05$ , <sup>\*\*</sup> $p < .01$

Note: Columns with different superscripts differed from each other at least at  $p < .10$ . Effect sizes are from the omnibus *F*-test.

### *Main Analyses<sup>8</sup>*

*Self-concept.* It was hypothesized that youths' self-concepts would become more positive after program participation and that this effect would be maintained at follow-up. To assess this, a 2 (September vs. February) x 3 (pretest, posttest, follow-up) multivariate analysis of variance (MANOVA) was conducted to assess changes in self-concept over time along the three dimensions of Other-orientation, Self-orientation and Negative Affect. Although there was no significant main effect for program session, Pillais=.08,  $F(3,38)=1.07, ns$ , the multivariate test of time was marginally significant, but met our criteria for meaningfulness, Pillais=.15,  $F(6, 158)=2.09, p=.057, \eta^2=.074$ , as did the interaction between program session and time, Pillais=.15,  $F(6, 158)=2.15, p<.05, \eta^2=.076$ . Follow-up simple effects analyses of time for each of the program groups indicated that for the September group<sup>9</sup>, all three aspects of self-concept changed over time (Other-orientation,  $F(1.70, 49.22)=2.79, p<.10, \eta^2=.088$ ; Self-orientation,  $F(2,58)=3.13, p<.10, \eta^2=.098$ ; Negative Affect,  $F(2,58)=3.81, p<.05, \eta^2=.116$ ). Follow-up comparisons using the Bonferroni correction (keeping overall familywise alpha at .10) indicated that the only significant differences were that the extent of positive Self-orientation decreased from posttest to follow-up and Negative Affect increased from pretest to follow-up (see Table 7). These findings were contrary to hypotheses, and suggest that September program participants experienced a less positive self-concept over time subsequent to participating in the program.

Among the February program participants, neither Other-orientation nor Negative Affect,  $Fs<1$ , changed over time, although once again, Self-orientation demonstrated

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<sup>9</sup>Separate analyses were also conducted on all outcome measures with gender, age, and visible minority status as between-subject variables, and none of the main effects nor interactions was found to be significant.

significant change,  $F(2,22)=3.05, p<.10, \eta^2=.217$ . Follow-up comparisons indicated that Self-orientation became significantly more positive from pretest to posttest (see Table 7). Follow-up Self-orientation was not significantly different from the pretest or posttest mean, indicating that participants had, on the whole, returned to baseline at follow-up. These findings suggested that the February participants' experienced an increase in positive self-concept during the program, however, these effects were not sustained at a four-month follow-up.

Table 7

*Descriptive Statistics for Self-Concept (Me or Not Me).*

	September	February	Comparison
	Group <i>M (SD)</i>	Group <i>M (SD)</i>	Group <i>M (SD)</i>
<b>Other-orientation</b>			
Pretest	3.86 (0.77)	4.06 (0.44)	
Posttest	4.03 (0.62)	4.08 (0.52)	
Follow-up	4.14 (0.50)	4.04 (0.45)	4.00 (0.58)
<b>Self-orientation</b>			
Pretest	3.65 (0.63)	3.34 (0.71) <sup>a</sup>	
Posttest	3.75 (0.62) <sup>a</sup>	3.74 (0.67) <sup>b</sup>	
Follow-up	3.52 (0.66) <sup>b</sup>	3.49 (0.53)	3.72 (0.63)
<b>Negative Affect</b>			
Pretest	2.34 (0.73) <sup>a</sup>	2.94 (0.54)	
Posttest	2.38 (0.66)	2.70 (0.61)	
Follow-up	2.63 (0.77) <sup>b</sup>	2.65 (0.63)	2.78 (0.86)

Note: Rows with different superscripts differed from each other at least at  $p<.10$

Although no significant improvements at follow-up were found in the program groups, self-concept was compared at follow-up with the comparison group. A between-subjects MANOVA<sup>1</sup> indicated that, using program participants' scores at follow-up, the groups were not significantly different, Pillai's=0.09,  $F(6, 162)=1.27, ns, \eta^2=.045$ . No significant differences were found at the univariate level on Other Orientation,  $F(2,$

$F(2,82)=0.64, ns, \eta^2=.015$ , Self-orientation,  $F(2,82)=1.16, ns, \eta^2=.028$ , or Negative Affect,  $F(2,82)=0.32, ns, \eta^2=.008$ . These analyses indicated that YCLC participants' self-conceptions at follow-up were no more positive or negative than were those of the comparison group, providing further evidence that any pre-post changes were due to short-term program effects.

*Feelings of similarity with other youth.* It was hypothesized that youth would report a greater sense of similarity to a diverse set of other youth at posttest, and that this would be maintained at follow-up. A 2 (September vs. February group) x 3 (pretest, posttest, follow-up) ANOVA was conducted. The within-subjects main effect of time was significant, Pillai's  $s=0.24, F(2, 72)=5.27, p<.01, \eta^2=.128$ , although the effects of program session and the interaction between session and time were not,  $Fs<1$ . Pairwise comparisons indicated that participants reported higher levels of inclusion of diversity at post-test and follow-up in comparison to pretest scores, and that there was no difference between post-test and follow-up (see Table 8). These results supported the prediction that program participation influenced youth to self-categorize at a more inclusive level, incorporating diverse outgroups into their conceptions of self, and that this more inclusive level of self-categorization was maintained at a four-month follow-up.

Despite this finding, when a oneway ANOVA was conducted comparing the levels of inclusiveness reported by program participants to the comparison group at follow-up, there was no significant difference between these groups,  $F<1$ . In effect, although the levels of inclusiveness reported by youth who completed the YCLC program were higher following program participation, this change was not substantial, given that

their scores either prior to or following participation were no different from those reported by youth who did not attend<sup>10</sup>.

Table 8

*Descriptive statistics for Inclusion of Diversity (IOS).*

	September Group <i>M (SD)</i>	February Group <i>M (SD)</i>	Comparison Group <i>M (SD)</i>
<b>Inclusion of Diversity</b>			
Pretest	3.21 (1.04) <sup>a</sup>	2.83 (0.64) <sup>a</sup>	-
Posttest	3.36 (1.05) <sup>b</sup>	3.28 (0.92) <sup>b</sup>	-
Follow-up	3.42 (0.99) <sup>b</sup>	3.09 (0.77) <sup>b</sup>	3.46 (0.92)

Note: Rows with different superscripts differed from each other at least at  $p<.10$

*Program participation and initiative experiences.* It was hypothesized that the YCLC program would provide more experiences of initiative compared with structured voluntary programs attended by comparison youth (after school programs, drama or voice classes). A between-subjects ANOVA (program groups vs. comparison group) indicated that participants' reports of the frequency of initiative experiences were significantly different,  $F(2,82)=3.76, p<.05, \eta^2=.084$ . Bonferroni's post hoc comparisons indicated that, as seen in Table 9, February program participants reported a higher frequency of initiative experiences compared with September participants, and only the February participants reported significantly greater initiative experiences than the comparison group<sup>11</sup>.

<sup>10</sup> No differences, overall, were found between program and comparison participants at pretest or follow-up. However, closer examination of patterns at the univariate level indicated that the most change was experienced by the February group, with this group being lower to begin with relative to the comparison group. Thus, it was unclear whether this change was due to a more positive effect of the program, or was simply regression to the mean (i.e., a statistical artifact that was significant by chance).

<sup>11</sup> Univariate analyses of the four components of initiative (goal setting, problem solving, time management and effort) demonstrated the same pattern as the total score, although the multivariate effect was not significant (probably due to low power).

Table 9

*Descriptive Statistics (Means (SD)) for Self-reported Initiative Experiences in Program vs. Comparison Groups.*

	September	February	Comparison	$\eta^2$
<b>Youth Experiences Survey</b>				
Initiative Experiences	2.93 (0.66) <sup>a</sup>	3.40 (0.46) <sup>b</sup>	2.89 (.59) <sup>a</sup>	.084*
Goal Setting	2.88 (0.83) <sup>a</sup>	3.37 (0.42) <sup>b</sup>	2.71 (0.77) <sup>a</sup>	.087*
Effort	3.13 (0.76)	3.63 (0.47)	3.19 (0.68)	.059
Problem Solving	2.86 (0.70)	3.26 (0.63)	2.82 (0.76)	.044
Time Management	2.80 (0.71)	3.28 (0.66)	2.83 (0.76)	.055

Note: Columns with different superscripts differed from each other at  $p < .05$

*Program participation and personal projects.* It was hypothesized that program participation would provide youth with the opportunity to practice initiative skills and that these initiative skills would manifest in real-life project pursuits. Thus, it was expected that compared with pretest ratings, at follow-up program participants would show greater project initiation, absorption, better time management, and perceive greater control over and greater self-identity with personal projects. A 2 (September vs. February group) x 2 (pretest vs. follow-up) MANOVA was conducted to compare personal project ratings over time. Neither the multivariate test of program group, Pillai's=.045,  $F(2,74)=.629$ ,  $\eta^2=.017$ , or time was significant, Pillai's=0.9,  $F(5,70)=1.38$ , ns,  $\eta^2=.09$ . However, the interaction between program group and time was significant, Pillai's=0.47,  $F(10,142)=4.33$ ,  $p < .001$ ,  $\eta^2=.234$ . Follow-up simple effects analyses indicated that among those participants in the September program, contrary to hypotheses, concentration,  $F(1,23)=6.15$ ,  $p < .05$ ,  $\eta^2=.21$  self-identity,  $F(1,23)=3.90$ ,  $p < .10$ ,  $\eta^2=.15$ , and time management,  $F(1,23)=3.12$ ,  $p < .10$ ,  $\eta^2=.12$ , decreased significantly. However, as

seen in Table 10, neither initiative,  $F<1$ ,  $ns$ ,  $\eta^2=.02$ , nor control,  $F<1$ ,  $ns$ ,  $\eta^2=.00$  changed significantly from pretest to follow-up.

Among the February program participants, no significant differences were found between pretest and follow-up means on any project dimensions. Thus, contrary to hypotheses, participants did not report increased initiative or increased aspects of initiative in their personal projects after the program.

To assess whether differences in project ratings (evidenced primarily by the September participants) reflected aspects of the program (albeit negative), the project ratings of program participants were compared to those of the comparison participants. The multivariate test of between-subjects effects was not significant,  $F<1$ . Univariate tests also revealed no significant differences, suggesting that respondents' levels of initiative aspects in their personal projects were not related to program participation.

Table 10

*Descriptive Statistics (Means (SD)) for Personal Project Dimensions in Program vs. Comparison Groups.*

	September	February	Comparison
Pretest			
Control	7.68 (1.85)	7.99 (1.28)	-
Initiation (Your Idea)	8.11 (1.68)	8.14 (1.17)	-
Self Identity (Like you)	8.20 (1.61) <sup>a</sup>	7.27 (2.09)	-
Time Management	7.18 (1.71) <sup>a</sup>	6.31 (2.20)	-
Concentration	7.88 (1.56) <sup>a</sup>	6.78 (1.65)	-
Follow-up			
PPA			
Control	7.58 (1.65)	7.60 (1.80)	7.52 (1.98)
Initiation	8.44 (1.62)	7.83 (1.59)	7.97 (1.54)
Self-Identity	7.51 (1.74) <sup>b</sup>	7.33 (1.42)	7.52 (1.99)
Time Management	6.75 (1.82) <sup>b</sup>	6.82 (1.69)	6.36 (2.55)
Concentration	6.76 (1.98) <sup>b</sup>	7.15 (1.47)	6.82 (1.91)

Note: Rows with different superscripts differed from each other at least at  $p < .10$

*Relations between initiative experiences within the YCLC program and project ratings at follow-up.* It was hypothesized that program participants' perceptions of initiative experiences would be predictive of their project ratings at follow-up, particularly in terms of initiation, concentration, control and time management. To assess this possibility, a series of hierarchical regressions was conducted whereby these four project dimensions were each regressed onto two dummy variables, with the first representing participation in the program (coded -1) or not (comparison group coded 2), and the second representing differences between the September (coded 1) and February groups (coded -1) (the comparison was coded 0 on this latter variable), followed by initiative experiences assessed by the YES on the second step, and finally the interactions between program participation and initiative experiences (cross-products) on the final step. If the latter step was significant, this would support the idea that the initiative

experiences gained in the YCLC program had a unique impact on the quality of youths' projects.

As seen in Table 11, when project control at follow-up was regressed onto these variables, program participation was not significant. However, contrary to hypotheses, greater initiative experiences within youths' activities (both program and comparison group activities) were significantly predictive of youth perceiving less control over their projects. The interaction between program group and initiative experiences was also significant. Follow-up simple effects analysis indicated that YES initiative experiences were significantly predictive of less project control among the February participants ( $r=-.72, p<.01$ ), but not the September participants ( $r=.16, ns$ ), although this finding ought to be interpreted with caution, as the pattern of zero-order correlations relative to the regression coefficients again suggests that this effect was an artifact of suppression.

Table 11

*Results of Regressing Project Control onto Dummy Variables Representing Program vs. Comparison Group Participation, Initiative Experiences (YES), and their Interactions.*

	Project Control (Follow-up)		
	r	$\beta$	$R^2_{CHA}$
Step 1: Dummy variables			.002
D1) Program groups vs. comparison group.	-.04	-.03	
D2) September vs. February	.03	.02	
Step 2: Initiative experiences (YES)	-.21*	-.24*	.050*
Step 3: Interactions			.107**
D1 X Initiative Experiences (YES)	-.08	.01	
D2 X Initiative Experiences (YES)	.06	1.91**	

\*  $p < .05$ ; \*\*  $p < .01$

Note: Standardized regression weights and  $R^2_{CHA}$  are values at each step of entry.

Finally, when project initiation, concentration or project time management at follow-up were regressed onto these variables, neither program participation nor initiative experiences significantly predicted these project dimensions at follow-up, nor did the interaction between initiative experiences and program participation.

*Relations between exposure to diverse youth at the YCLC program and feelings of similarity.* It was hypothesized that participants' feelings of similarity with other youth (operationalized in terms of *inclusion of diversity*) would be a function of the extent to which the program itself exposed them to a diverse set of youth. Hierarchical regressions were conducted to assess this possibility, whereby inclusion of diversity scores at posttest and follow-up on the Inclusion of Other in the Self Scale were each regressed onto the two dummy variables reflecting program group (again, the first representing program

participation or not, and the second representing differences between September and February groups), followed by reported exposure to diverse peers as assessed by the YES on the second step, and the interactions between program participation and diversity experiences (cross-products) on the final step. If the last step was significant, this would support the idea that the experiences with diverse peers at the YCLC program had a unique impact on youths' self-categorizations, or feelings of similarity with diverse youth. Note that the scores for the comparison group were identical in the two analyses, as these measures were only administered to this group at one time-point. However, their inclusion in both analyses permitted an assessment of whether the relations differed from the program participants either immediately following the program or at the follow-up.

As seen in Table 12, when inclusion of diversity scores at posttest were regressed onto these variables, program participation was not significant. In effect, greater experiences with diverse peers within youths' activities (both program and comparison group activities) were significantly predictive of youth perceiving greater similarity with diverse youth. Indeed, the interaction between group (programs vs. comparison) and experiences of diversity was not significant, indicating that the YCLC program did not have a significant impact, over and above other structured voluntary activities, in terms of broadening youths' self-categorizations.

Table 12

*Results of Regressing IOS Diversity at Posttest onto Dummy Variables Representing Program vs. Comparison Group Participation, Diverse Peer Experiences (YES), and their Interactions.*

	IOS Diversity (posttest)		
	r	$\beta$	$R^2_{CHA}$
Step 1: Dummy variables			.004
D1) Program groups vs. comparison group.	.05	.06	
D2) September vs. February	.01	.03	
Step 2: Diverse peers (YES)	.26**	.27*	.066*
Step 3: Interactions			.009
D1 X Diverse Peers (YES)	.09	.34	
D2 X Diverse Peers (YES)	.03	-.04	

\*  $p < .05$ ; \*\*  $p < .01$

Note: Standardized regression weights and  $R^2_{CHA}$  are values at each step of entry.

As seen in Table 13, a comparable pattern of results was found in relation to follow-up self-categorization scores. Program participation was not significant, but greater experiences with diverse peers within youths' activities were significantly predictive of youth perceiving greater similarity with diverse others. This relation did not differ as a function of program participation.

Table 13

*Results of Regressing IOS Diversity at follow-up onto Dummy Variables Representing Program vs. Comparison Group Participation, Diverse Peer Experiences (YES), and their Interactions.*

	IOS Diversity (follow-up)		
	r	$\beta$	$R^2_{CHA}$
Step 1: Dummy variables			.018
D1) Program groups vs. comparison group.	.06	.10	
D2) September vs. February	.10	.13	
Step 2: Diverse peers (YES)	.35***	.37***	.126***
Step 3: Interactions			.004
D1 X Diverse Peers (YES)	.09	.13	
D2 X Diverse Peers (YES)	.14 <sup>+</sup>	.19	

<sup>+</sup> $p < .10$ , \*\*\* $p < .001$

Note: Standardized regression weights and  $R^2_{CHA}$  are values at each step of entry.

It was also hypothesized that if a sense of social identification with other groups was a core process that imparted a set of norms that positively reflected on the youth, the extent to which they perceived similarity (or inclusiveness) with other youth would be associated with expressing more positive self-concepts. Analogous to previous hierarchical regression analyses, self-concept scores (each of self-orientation, other-orientation and negative affect at both posttest and follow-up, separately) were regressed onto the two dummy variables representing program participation, followed by inclusion of diversity (IOS) scores on the second step, and the interactions between program participation and inclusion of diversity (IOS) scores on the final step (cross-products). Again, if the last step was significant, this would support the idea that the feelings of

similarity gained in the program (IOS inclusion of diversity scores) had a unique impact on aspects of self-concept. As before, the scores for the comparison group were identical in the two analyses, as these measures were only administered to this group at one time-point. However, their inclusion in both analyses permitted an assessment of whether the relations differed with the program participants either immediately following the program or at the follow-up.

When each of posttest other-orientation and self-orientation scores were regressed separately onto these variables, neither program participation, IOS inclusion of diversity scores, nor their interaction were significantly predictive. As noted in the previous analysis examining the effects of program participation, when posttest negative-affect scores were regressed onto the predictors, program participation significantly predicted negative affect (see Table 14). However, negative affect was not significantly related to IOS Diversity scores at posttest, nor the interaction between IOS scores and program participation.

Table 14

*Results of Regressing Negative Affect (self-concept aspect) at posttest onto Dummy Variables Representing Program vs. Comparison Group Participation, IOS Inclusion of Diversity scores, and their Interactions.*

	Negative Affect (posttest)		
	r	B	R <sup>2</sup> <sub>CHA</sub>
Step 1: Dummy variables			.058 <sup>+</sup>
D1) Program groups vs. comparison group.	.20*	.16	
D2) September vs. February	-.19*	-.14	
Step 2: IOS Diversity (posttest)	-.11	-.12	.014
Step 3: Interactions			.028
D1 X IOS Diversity	.17 <sup>+</sup>	.07	
D2 X IOS Diversity	-.15 <sup>+</sup>	.63	

<sup>+</sup>p < .10, \*p < .05

Note: Standardized regression weights and R<sup>2</sup><sub>CHA</sub> are values at each step of entry.

None of the variables significantly predicted follow-up other-orientation or negative affect. However, as seen in Table 15, when Self-orientation at follow-up was regressed onto these variables, although program participation was not significantly predictive, perceived similarity to diverse others at posttest (IOS diversity) was significantly related to a more positive self-orientation at follow-up. The interaction between IOS diversity scores and program participation was not significant.

Table 15

*Results of Regressing Self-orientation (self-concept aspect) at Follow-up onto Dummy Variables Representing Program vs. Comparison Group Participation, IOS Inclusion of Diversity scores, and their Interactions.*

	Self-orientation (follow-up)		
	r	$\beta$	$R^2_{CHA}$
Step 1: Dummy variables			.028
D1) Program groups vs. comparison group.	.17 <sup>+</sup>	.17	
D2) September vs. February	-.03	.02	
Step 2: IOS Diversity (posttest)	.19*	.18 <sup>+</sup>	.093 <sup>+</sup>
Step 3: Interactions			.000
D1 X IOS Diversity	.17 <sup>+</sup>	-.04	
D2 X IOS Diversity	-.02	-.07	

<sup>+</sup> $p < .10$ , \* $p < .05$

Note: Standardized regression weights and  $R^2_{CHA}$  are values at each step of entry.

#### *Content Analysis of Open-ended Responses*

A content analysis of the qualitative-feedback questionnaires was performed to evaluate any additional comments or perceptions of the program participants. September and February participants' responses were analyzed separately in order to capture the variability in experiences in each program as well as common concerns of participants.

*Reasons for attending.* Participants were initially asked why they decided to attend the YCLC weekend. Of the four closed-ended possibilities given, as seen in Table 16, participants were most likely to indicate that they attended because the structure of the program appealed to them (i.e., they enjoyed adventure and role-playing games, acting, theatre and the theme of the middle ages). A few participants indicated that

parents forced them to attend. Chi-square analyses indicated no significant differences between the program groups were evident.

In terms of the additional open-ended responses, five categories emerged (see Table 16). Of these, September participants were most likely to indicate that they attended based on a friend's recommendation, whereas the February participants were more likely to have attended based on an adult's recommendation or out of general self-interest. Overall, it appears that participants came to the program because they expected to have fun.

Table 16

*Reasons for program participation (n and percentage of respondents in each program group and Chi-square value).*

	September n(%)	February n(%)	$\chi^2$
<b>Multiple choice</b>			
My parents forced me to go	3(13.0)	2(16.7)	-
Acting, theatre, and the middle ages are fun	6(26.1)	1(8.3)	-
I like adventure and role-playing games	8(34.8)	5(41.7)	-
I wanted to make new friends	5(21.7)	1(8.3)	-
<b>Open-ended categories</b>			
Friend's recommendation	6(26.1)	0(0.0)	3.78 <sup>+</sup>
Adult's recommendation	1(4.3)	3(25.0)	3.32 <sup>+</sup>
General self-interest	2(8.7)	4(33.3)	3.37 <sup>+</sup>
Enjoyment of Camping	2(8.7)	1(8.3)	<1
Wanting a new experience	3(13.0)	1(8.3)	<1

<sup>+</sup> $p < .10$

*What participants reported learning at the program.* When participants were asked what they felt they learned from the weekend, six categories emerged from responses (see Table 17). Most participants' responses discussed learning either group-

related or personal skills, and teamwork was the most frequently indicated category. For example, one participant wrote "I learned teamwork. Everyone was helping and what I enjoyed the most – it was the way people were encouraging others". Our concept of appreciation for diversity came through in several participants. For example, "I learned how different personalities can clash, somewhat, in one group but at the same time, come together" and

Just, I felt like being nicer to people in general. And that, well I might sound like a broken record, but I really mean it. All people are equal no matter of race or sex or how much money they have.

Numerous participants from both groups indicated learning personal efficacy and knowledge, although this was significantly more likely to be expressed by the February participants. One February participant wrote, "I used to be a really shy person. I learned that if you want your ideas to be heard, you have to speak up and share them with the world".

Table 17

*What participants reported learning at the program (n and percentage of respondents in each program group and Chi-square value).*

Categories	September n(%)	February n(%)	$\chi^2$
Personal Efficacy and/or Knowledge	4(17.4)	9(75.0)	11.21***
Teamwork	10(43.5)	4(33.3)	<1
Appreciation for Diversity	5(21.7)	1(8.3)	<1
Practical Skills	1(4.3)	0(0.0)	<1
Nothing Learned	3(13.3)	0(0.0)	1.71
Other			

\*\*\* $p < .001$

*Initiative skills.* Participants were also explicitly asked to provide their perceptions of whether they had gained greater initiative (framed as being more excited about their activities and being better able to finish them), and then to expand on their answer. As indicated in Table 18, most participants responded affirmatively, however, a large portion also indicated “no” that they had not felt different about their activities or approached them differently since the program.

In describing the affirmative responses, three categories emerged (see Table 18). Most participants indicated that they showed more initiative, with references to improvements in several aspects of initiative, including problem solving, effort and time management. For example, one participant mentioned “I am able to stick with a project and complete it better and more effectively”, while another wrote:

This happened to me also, and one thing that helped me notice this was when we had to do a huge book report/display project. Before I would have put it off but this time I came up with a unique idea and my friend and I’s [sic] project was so good it was kept as an example for others.

A few participants indicated that they enjoyed their own activities more or appreciated certain aspects of extra-curricular activities. For example, “I actually changed a bit....by actually enjoying going to different extra-curricular activities”, “In class I can participate better, so it became more enjoyable” and “Before I went, I didn’t like to learn, but now I think it’s fun and easy”. Interestingly, one participant indicated that program effects did not last, “Well, I felt more excited for a while (a few weeks after), but now it’s the same as before I went to the program”. No significant differences in the proportion of respondents to each question between the groups were found.

Table 18

*Initiative Skills (n and percentage of respondents in each program group and Chi-square value).*

Categories	September	February	$\chi^2$
	n(%)	n(%)	
Yes	8(34.8)	5(41.7)	<1
Initiative	7(30.4)	2(16.7)	<1
Enjoyment of Activities	1(4.3)	2(16.7)	1.52
Other	2(8.7)	0(0.0)	1.11
No	9(39.1)	3(25.0)	<1

*Experiences of personal change as a result of the program.* Question 4 asked participants whether they felt they had experienced any personal change as a result of the YCLC program. Five categories emerged from responses (see Table 19). Most participants discussed themes of changing in terms of gaining a type of personal competence. The most frequent response from both groups was improvements in assertiveness and extraversion. One participant wrote, “I am more sure of myself” while another said “I don’t think I’m as shy and I’m not as worried about what people think about me!”. Another category reflected a gain in personal competence when pursuing a goal, including motivation, effort and self-regulation. For example, one participant wrote “I am [better] able to control my temper” while another wrote “I keep trying and not giving up”. Behaving positively and feeling positive about oneself in general emerged as another category. For example, “My attitude has changed – it’s now more positive” and “I was able to see more quality in my life and see that trusting others would make my life more purposeful”.

Participants also discussed the theme, again, of gaining an increased appreciation for others. One participant wrote, “I’m more open to friendships with other people” while another indicated “I am more accepting of other people”.

The only significant difference between the groups was that only September participants reported that they experienced no change or even a negative change since the program. One participant expressed that the program advertising was misleading “I don’t want to go camping anymore – I ask more questions before I go blindly into something. I’m less open to doing new things.” One participant also wrote “Nothing – nothing has changed.”

Table 19

*Experiences of personal change as a result of the program (n and percentage of respondents in each program group and Chi-square value).*

Categories	September n(%)	February n(%)	$\chi^2$
Assertiveness and Extraversion	8(34.8)	4(33.3)	<1
Appreciation for Others	4(17.4)	3(25.0)	<1
Motivation, Effort and Self-Regulation	2(8.7)	3(25.0)	1.71
Positive Behaviour and Emotions	3(13.0)	1(8.3)	<1
No Changes or Negative Changes	6(26.1)	0(0.0)	3.78 <sup>+</sup>
Other	1(4.3)	1(8.3)	<1

<sup>+</sup> $p < .10$

*The program’s ability to provide a context for interaction with diverse youth.*

Sixteen participants (about equivalent numbers from each program group,  $\chi^2 < 1$ , ns) answered positively that the weekend gave them a chance to meet people from other cultures, and six categories emerged from responses (see Table 20). No significant

differences in the proportion of respondents to each question between the groups were found.

However, many participants indicated they already interacted with members of other cultural or age groups, and that this was not a novel aspect of the YCLC program. “No, all the people I hang out with are from different cultures” and “I didn’t change as I’ve always been comfortable with others.” Several participants indicated that they did get this chance to interact with diverse others, but gave no specifics about the characteristics of other youth they met. For example, “Yes, this happened to me. The girls with whom I chose to share the tent at the camp are normally ones with whom I don’t hang out.” A few participants from each group indicated hanging out with youth from other ethnicities and age groups. For example, “...I did meet people from another race and they were cool” and “I found [myself] to be more sociable with younger kids”.

A small number of participants responded that they did not meet anyone different “No, this didn’t happen to me because I didn’t meet anyone who was my type”, while two participants’ from the September program responded that interaction with another group had a negative outcome. “Yes, but we ended up fighting with them.” And

There was a majority of a certain type of race and they all clumped together so there really wasn’t a lot of meeting of other cultures going on there. It was not overt racism, but it wasn’t exactly an experience that made me open to different cultures.

Table 20

*The program’s ability to provide a context for interaction with diverse youth (n and percentage of respondents in each program group and Chi-square value).*

	September n(%)	February n(%)	$\chi^2$
<b>Categories</b>			
I already know different types of people	6(26.1)	4(40.0)	<1
Yes (but no specifics given)	5(21.7)	1(8.3)	<1
Yes (People from other cultures)	3(13.0)	3(25.0)	<1
No, this did not happen	4(17.4)	2(16.7)	<1
Yes (People from other age groups)	2(8.7)	2(16.7)	<1
Negative interaction	2(8.7)	0(0.0)	1.11

*Feedback for changes.* When asked for feedback in terms of their suggestions or changes for the program, this elicited the most numerous and most varied responses from participants. Nine categories emerged (see Table 21). For September participants, the most frequent suggestion was that males and females should have been combined for the program activities, whereas none of the February youth (who were all girls) discussed wanting to do activities with boys. One September participant wrote: “Mix boys and girls more...there was a major gender divide. [It] could be beneficial to communicate with the opposite sex”. Significantly more February compared with September participants wished to interact with participants closer to their own age during the program. For example, “The age group was a bit too wide. You might want to try something more like 10-13, 14-17” and “A closer age group”.

Participants also suggested improving program logistics, with most concerns regarding the sleeping arrangements at the September program. For example, “They gave a general outline that you’d be outside – but not that you’d be building your camp in the night and sleeping in the dirt. [They] should at least have tents”. Another participant wrote “It was bad for us because we didn’t know how to build it [the tarp], so we were cold during the night”. Although the between-group difference was not significant, only

September participants raised concerns about the nature of program activities, commenting that they felt forced to participate if they didn't want to or could not, and that the advertising of the program did not match what truly occurred.

A few participants from both groups indicated regrets about their personal behaviour at the program, expressing concerns such as wishing they had been more honest during the sharing ceremonies or wishing their attitude had been different. For example, "I think I could have helped my team more than I did" and "I would not have been so crabby when I first got there".

It should be noted that several participants indicated that they would not have changed anything about the program, and that they enjoyed it exactly how it was. For example, one participant wrote "I really don't know what to change, I enjoyed it a lot! It was awesome!" while another wrote "Nothing – it was well prepared".

A few participants suggested the addition of other activities, such as organized sports games and requesting free time to get to know other youth. A few youth also commented that some behaviour of program facilitators were inappropriate, raising concerns about a lack of supervision during the September program and the need for more structured rules, as well as concerns about particular facilitators (e.g., "Some facilitators were really good, but some were pretty unfit for the job. Some of them would swear. They should not, especially at a leadership camp where you're supposed to be teaching values"). Some youth commented that the behaviour of other youth in the program was inconsiderate.

Table 21

*Feedback for changes (n and percentage of respondents in each program group and Chi-square value).*

Categories	September	February	$\chi^2$
	n(%)	n(%)	
Combine genders	7(31.8)	0(0.0)	4.60*
Age group	1(4.3)	4(33.3)	5.41*
Logistics	5(21.7)	1(8.3)	<1
Complaints about program activities and advertising	3(13.0)	0(0.0)	
Activity requests	2(8.7)	1(8.3)	<1
Personal behaviour	2(8.7)	3(25.0)	1.71
Change nothing	4(17.4)	1(8.3)	<1
Behaviour of volunteers at program	2(8.7)	1(8.3)	<1
Behaviour of program youth	1(4.3)	0(0.0)	<1

\* $p<.05$

### Discussion

Although considerable research has been conducted regarding the effectiveness of adventure programs on a range of outcomes, little of this research has examined how the processes within these programs are connected to various outcomes (Hattie et al., 1997). In the present investigation, we argued that a community-based adventure program would provide youth with the opportunity to have initiative experiences and to bridge differences with youth from diverse backgrounds. Moreover, given that past research has suggested the effects of these programs strengthen, rather than weaken over time (Hattie et al., 1997), we further expected that these experiences would carry on to affect youths' daily lives several months after participation in the program. To the extent that this was the case, it could be argued that these experiences had become internalized, facilitating

initiative in the youths' personal project pursuits and inclusiveness of diverse youth in their self-concepts.

*Differences between September and February Programs*

Although variation across specific sessions of the program was not anticipated, it should be noted that the two sessions (referred to as the September and February sessions) evaluated in the present study could not be combined for analyses. In addition to the demographic differences (February participants were all female, older, and less likely to be visible minorities), responses to the Youth Experiences Survey (Hansen & Larson, 2005) indicated that the experiences encountered in the two sessions may have differed substantially, in that the February participants reported higher initiative experiences and lower negative experiences within the program. Indeed, the observations of this researcher, which were followed up with informal interviews with the volunteers and the open-ended reports of the youth, suggested that the integrity of the September program was highly questionable.

*Program integrity of the September session.* Program integrity refers to a program being conducted in practice as intended in theory and design, whatever the theory or methods (Moncher & Prinze, 1991). Effective programs with high program integrity are characterized by good management, tight design and skilled practitioners. These issues invariably relate to how well the staff are trained in the program model, the degree of supervision, as well as procedures used to monitor program delivery (Andrews & Dowden, 2005; Goldstein & Glick, 2001).

A lack of integrity in administration of the September program may have affected the capacity of the program to achieve significant improvements in the attitudes and skills

of the youth participants. This included both the program itself, as well as the context in which the evaluation measures were administered. Indeed, the pretest measurement session was extremely chaotic, with youth arriving at different times through the session, with one busload of rowdy teenagers arriving nearly a half hour late. Despite prior assurances to the contrary from program organizers, the researchers arrived to a situation in which there was inadequate supervision of the youth, substantial distractions presented by program volunteers who entered the testing rooms in program costumes, and the testing space itself was inadequate, as there were not enough tables and chairs for the youth to sit at and so several sat on the floor to complete the measures. In fact, because there were no program volunteers present to register and greet youth and their parents, the researchers themselves were drawn away from the administration of the survey to take responsibility for this. Indeed, a couple of the researchers had to stand on the road to direct traffic as there were no signs directing parents and youth onto the program site. All these factors combined made it very difficult to supervise the youth to ensure that they worked on the questionnaires individually and without discussing the answers among each other. At the very least, these factors may have undermined the integrity of the pretest responses of September participants, although on average they did not appear to differ from those of the February group.

More importantly, the chaotic atmosphere that was evident at pretest characterized many of the subsequent activities over the weekend. There were organizational problems, such as moving from one activity to another, and even running the activities. For example, some program volunteers would indicate that it was time to move to the next activity, whereas others would state that this was not the case.

Volunteers would express uncertainty concerning how to run the challenge activities, and would disagree with one another in front of the youth. These factors combined to allow youth to be bored and uncertain of what they were supposed to be doing, and so they would wander off in pairs or cliques to amuse themselves.

These issues were, in part, due to the fact that core program facilitators were often not present at the challenge activity sites to supervise the smooth running of activities. However, many issues stemmed from the inadequate training provided to the adult volunteers. Volunteers mostly comprised novices who were naive to the structure or challenges of adventure programs, including the parents of some of the youth participants, friends of the program designer, friends of this researcher, or first time volunteers for the program in general. Despite the inexperience of the volunteers, training was brief and did not entail going over the logistics of conducting program challenge activities, or how to deal appropriately with youth in terms of supporting them throughout the activities or dealing with discipline problems. Rather, it consisted of watching a video about the program's goals, learning how to role play to inspire the mythical theme, and ensuring that volunteers understood not to direct children in their growth and not to coach them to overcome the challenges. This latter directive confused some of the volunteers in terms of how much they needed to intervene with potential problems, such as what to do when youth refused to participate in activities.

Without knowledge of the sequence of activities or how to actually conduct them, the adults did not appear to be competent leaders, and therefore many youth were not as respectful as they might have been otherwise. Not surprisingly, these factors may have negatively affected the effectiveness of the September program, as proper facilitation of

the program would be key in promoting the well-being, positive attitudes and skills of the youth.

As though the situation was not difficult enough for the volunteers to manage, the September program consisted of a relatively large group of youth from highly diverse backgrounds. In addition, it was one of the few programs that had been conducted with both boys and girls, and volunteers had the added task of keeping them separated. Thus, even beyond the administration of the activities, the volunteers had substantial supervisory and monitoring responsibilities.

*Program integrity of the February program.* In contrast to the September session, the February program was much more organized and ran much more smoothly. Firstly, the training for program volunteers was more substantial. Volunteers were sent an information package outlining what to expect well in advance of the weekend, a training session was held one month prior to the program, and the actual training session on the Friday afternoon before the program's beginning was longer and consisted of concrete explanations of how activities were run and the specific roles the volunteers were expected to play. Further, during the program weekend, at meal times, volunteers were debriefed about previous challenges and were briefed on upcoming challenges. Core experienced facilitators were always present, stationed at each challenge site, to ensure the challenges ran properly and that any uncertainties could be effectively dealt with. The smaller size and more homogeneous nature of the youth (all girls) taking part in the February program likely also made it easier to implement the activities and manage any disciplinary problems.

*Supporting evidence for the differential integrity of program sessions.* The problems observed in the September program were evident in youths' responses to the open-ended questionnaire. Specifically, the September participants were significantly more likely to indicate that their experiences of personal change resulting from the program were nonexistent or negative. In addition, several September participants complained about the nature of program activities and misleading advertising, neither of which were raised by any of the February participants.

Quantitative responses to assess the experiences gained over the course of the program session further pointed to a lack of program integrity in the September session. Firstly, participants did not report higher initiative experiences than comparison participants. In addition, the experiences that were reported did not appear to generalize outside of the weekend activities of the September group, in that they were not predictive of greater initiative in youths' personal projects ratings. In fact, not only did initiative in personal projects not increase from pretest to follow-up, but, concentration, self-identity and time adequacy actually decreased significantly for this group. Youth who participated in the September session also reported a significant decrease in self-orientation (aspect of self-concept) and an increase in negative affect over time. It should be noted, however, that despite the poor running of the September session, just as was reported by the February session, youth reported higher inclusiveness of diversity following the program, and this change was retained several months later.

#### *Program Participation and Initiative Experiences*

As the two program sessions differed substantially in terms of integrity, it would seem most appropriate to base our evaluation of the potential effectiveness of programs

on one that has been conducted appropriately. Thus, our conclusions in this respect could be based primarily on the findings of the February program session.

It has been argued that a key process in adventure programs involves providing youth with an environment in which to build and practice initiative skills (Larson, 2000), wherein three key elements occur together: intrinsic motivation, concerted engagement (concentration), and a temporal arc of effort. Indeed, in the present investigation, youth participating in the February session reported higher initiative experiences compared with controls. Thus, when implemented properly, the YCLC program can provide youth with greater initiative experiences compared with after-school and performing arts programs (which were activities the comparison group participants reported their initiative experiences in).

However, it was argued that the value of these experiences ought to be assessed in terms of their translation into the everyday activities of youth following program participation. By this criteria, even the February participants did not appear to benefit, as program participants did not show greater initiative, better concentration, more control over, greater self-identity or better time management in their personal projects at follow-up, and there were no differences between the program and comparison groups on project dimension ratings at follow-up.

Thus, although the program participants in the February session reported experiencing initiative opportunities as part of the YCLC weekend, they did not appear to have gained sufficient skills to readily apply initiative in their daily lives and personal project pursuits, and indeed, initiative experiences in the program and initiative in project pursuits were unrelated. However, in response to the open-ended questions, nine

participants (approximately 20%) discussed learning enduring initiative skills. Thus, it is also possible that the PPA method, as it was used in the present study, was not sensitive to such changes. Specifically, the project dimensions employed in the current study were standard PPA dimensions and did not directly reflect the components of initiative defined by Hansen and Larson (2005). For the current study, these standard dimensions were used because it was thought that they would tap into the expression of initiative in youths' daily pursuits. For example, it was thought that project control would reflect greater perceived control of projects due to initiative skills such as increased effort put forward and better problem solving, and greater project self-identity would reflect the initiative aspect of authentic goal-setting. It may be that if "initiative" dimensions that were more directly aligned with Hansen and Larson's (2005) conceptual definition had been developed using the PPA methodology (e.g., dimensions reflecting aspects of problem solving, effort, time management and goal setting), greater evidence of their use over time might have been evidenced, and YES initiative experiences might have had more predictive validity in terms of their translation into youths' everyday activities.

PPA may also be problematic for pre-post assessment as there was considerable variability in the types of projects youth were likely to select (both within and across time points). Many youth, for example, chose very different types of projects at follow-up compared with pretest. This may have made it difficult to detect significant improvements in particular types or aspects of project pursuit. Importantly, some types of projects are more suited to using initiative skills than others. For example, "getting rid of my acne" is clearly an activity which initiative is not as applicable to initiative as a project such as "to win my school singing contest". Because we were interested in the

youths' subjective appraisals of their projects, an analysis of the actual projects described based on 'objective' ratings was not conducted. It is possible, however, that youths' projects may have changed to reflect greater initiative, but their threshold for what required initiative was also raised. These more dynamic aspects of initiative have not been extensively explored in either our own, or in others' research. If our proposition is true, in that the bar for initiative in youths' projects increased, then it would not be surprising that project dimension ratings did not change over time.

Another strategy that might allow for an assessment of changes in initiative could be the use of a structured, pre-determined set of categories of projects (e.g., Dowden, 2004) at each measurement time-point. Participants could then rate aspects of initiative in each project category, reducing the error variance in pre-post assessment and tapping only into projects that might be relevant to initiative skills. Structured categories for this sample could include, for example, school projects, after-school activities, and long term plans.

Although the use of PPA may have presented some unique measurement challenges, difficulties with respect to the measurement of initiative were certainly not unique to the present study, as no other researchers have provided measures that appear to better reflect such actions or behaviours. Some possibilities have been considered, and indeed, Larson (2000) suggested that Heath (1999) may have measured initiative, indirectly, in terms of how it is reflected in language. Heath examined language use among adolescents involved in structured voluntary activities, and found an increase over time in the language youth used that reflected skills to think about the world as a field of action. Larson (2000) argued that youths' language change was reflective of the

development of a language of initiative, reflecting skills for implementing plans, and for directing and regulating their activities over time. For example, Heath found a dramatic increase in youths' use of conditionals (If A, B & C, then X, Y and Z), modals ("could"), strategies for getting clarification from others ("You mean if we do X, then....?"), and varied genres and voices in speech (e.g., taking others' perspectives and playing multiple roles). Despite these findings, Heath's observations about youths' language change in extra-curricular activities were not corroborated with evidence of actual behaviour change, and hence, there is no evidence linking this language change with acts of initiative (Larson, 2000). In this sense, the PPA methodology may, in fact, represent a more promising opportunity, given its focus on daily activities and actions, and if developed to more closely fit the conceptual definition of initiative may prove useful. Indeed, Wilson & Lipsey (2000) found that researcher-developed or adapted measures generally yielded higher effect sizes within a given treatment domain than standardized or published measures. Such measures may be more likely to tap the relevant aspects of the construct being affected by the intervention than a published measure that is not necessarily well adapted to the circumstances of a particular intervention.

#### *Program Participation and Self-Concept and Inclusiveness of Diversity*

Past research has suggested that the group-oriented context of adventure programs might provide a milieu for positive interpersonal experiences for participants, such as increased cooperation, relating skills and social competence (Hattie et al., 1997). Following from Sherif's (1956) Robber's Cave Experiment, in which it was found that boys at summer camp in rivaling groups were brought together only by superordinate goals, in which every individual was acting together to surmount a challenge, we

examined positive interpersonal outcomes within a social identity/self-categorization framework (Tajfel & Turner, 1979; Turner, 1987). We argued that the YCLC program would provide youth with the opportunity to bridge differences, by bringing together a diverse set of youth with superordinate goals and allowing them to think of themselves as members of one group working together rather than members of opposing outgroups. Previous research has shown that individuals will, when primed, take on the identity of the ingroup (e.g., Gaertner et al., 1994). We wished to examine the effects of categorizing the self into a broader social identity both interpersonally (increased perceptions of inclusiveness) and intrapersonally (more positive self-concept).

As noted earlier, when the program was not effectively implemented, youths' self-orientation actually decreased from posttest to follow-up and negative affect increased from pretest to follow-up. However, even when the program was implemented with higher integrity (i.e., the February session), effects on self-concept were minimal, at best. Other-orientation and negative affect did not change significantly; although, self-orientation became more positive immediately following the program, it returned to baseline at follow-up. This does not fit into Hattie et al.'s (1997) meta-analytic findings that adventure programs continue to yield effects as time passes. This said, despite the lack of lasting improvements in self-concept evidenced by quantitative measures, in response to open-ended questions at follow-up, several participants explicitly reported improvements in personal efficacy and self-knowledge, describing themselves as having become more extraverted and assertive, showing improvements in motivation, effort and self-regulation, and experiencing an increase in positive emotions and positive behaviour towards others. Thus, participants noticed several changes in themselves that were not

targeted by our structured self-report instruments. Participants may have reported these changes due to retrospective recall that they were worse off prior to the program, as opposed to experiencing them in reality. However, much like a placebo, if they actually felt like they had improved, they might have experienced other more tangible positive benefits in well-being that weren't necessarily tapped by our measures.

Even when the program was not effectively implemented, program youth reported higher levels of inclusiveness at posttest and follow-up. Likewise, responses to the open-ended questionnaire corroborated these changes, in that, several participants reported that they had experienced an increased appreciation for the diversity in others.

Despite these reports of personal change and increased inclusiveness, follow-up levels of inclusion were not higher than those evident in the comparison group. In both instances, the direct relation between the extent to which the program (or other structured volunteer activities) provided opportunities for youth to interact with diverse youth and reports of greater inclusiveness were significant. This suggests that, although the YCLC program may have influenced youth to be more inclusive in their self-categorization, youth may gain equally valuable experiences for bridging differences through their involvement in other structured voluntary activities (such as drama groups, voice lessons, and after-school programs).

Contrary to expectations, these increased feelings of inclusiveness were not associated with a more positive self-concept. Previous researchers noted that inclusiveness, or shared in-group membership, decreased the psychological distance between individuals and facilitated the arousal of empathy (Hornstein, 1976), prosocial behaviour (Piliavin et al., 1981), forgiveness and generosity (Hewstone, 1990).

Therefore, our findings that inclusiveness was not related to a more positive other-orientation (participants perceiving themselves as caring, a good team member, someone who can be trusted, and responsible, among other things) seem to run contrary to previous findings. However, previous studies have assessed how respondents perceived other ingroup members *in particular*. In the present study, respondents were asked how they perceived *themselves* toward others in general. Therefore, in the present study, our measure likely tapped self-concept at the individual level, rather than into how the individual positioned him or herself in relation to other members of their own group.

#### *Conclusion and Recommendations*

It should be noted that, the findings of this study should be interpreted with the same caution as should be given to any non-randomized study, as participants were not randomly assigned to program or comparison group activities (i.e., it is difficult to determine whether changes over time for program participants were due to characteristics of the program, or characteristics of participants' themselves or other unmeasured variables). This limitation does not impose much restriction on interpreting the current results, however, as no substantial changes over time were found. In sum, the present study found that the experiences of youth within the YCLC program varied considerably as a function of how it was implemented. However, even under the more ideal circumstances, program effects were limited to either outcomes that were not maintained over time, or to changes that did not appear to be uniquely derived from the YCLC. Although youth who participated in the YCLC reported more opportunities for initiative in the program, these experiences did not transfer to initiative in their project pursuits following program participation. As well, although the opportunities for interacting with

diverse youth were associated with higher inclusiveness, these relations were evident irrespective of which session youth participated in, or whether they participated in the YCLC or another structured voluntary activity. Thus, it appears that the YCLC did not have the profound effects on youth that might have been anticipated on the basis of past research evaluating adventure programs (Cason & Gillis, 1994; Hattie et al., 1997; Wilson & Lipsey, 2000). It should be noted that the findings of this study should be interpreted with caution, as participants were not randomly assigned to program or comparison group activities (i.e., it is difficult to determine whether changes over time for program participants were due to characteristics of the program, or characteristics of participants' themselves or other unmeasured variables).

However, there might be changes that could be incorporated into the YCLC that might enhance its impacts. Thus, in conclusion, based on the findings of other evaluations, along with the specific gaps identified in the present program, five recommendations for improving the program are suggested:

- 1) The presence of a follow-up activity for youth (Rawson, 1973; Hattie et al., 1997) may serve to help maintain program effects, as a return to baseline levels of functioning may be due, in part, to lack of post-program support. Follow-up activities may serve to re-connect youth both with each other and with the message of the program. One such activity was implemented after the February program, in which some February participants subsequently edited and produced a video of the program. However, the September participants did not have this kind of opportunity. Although there was no difference between the programs in terms of maintaining benefits from the program,

perhaps follow-up activities that are explicitly intended to further instill program objectives could be explored (i.e., initiative-building activities).

2) Continued emphasis on appropriate volunteer recruitment and adequate training should be a priority, as correcting these issues made an enormous difference in the quality of the experience for youth participating in the September and February programs. Echoed by the youth in the open-ended responses, volunteers' competence, enthusiasm, relating skills, and abilities to be a good role model were central to how youth perceived the program, as well as the nature and quality of their participation. In line with this recommendation, it should be carefully considered who is suited to serve as a volunteer. This is a challenging issue, as it is often difficult in the first place to recruit individuals to volunteer an entire weekend of their time. How well volunteers are trained in the program model (both practical and theoretical aspects) has a large influence on program integrity (e.g., Goldstein & Glick, 2001). Information sent out to volunteers before the program (and a pre-program meeting if feasible), the longer and more practical training session on day one of the program, and continued debriefings and briefings throughout the weekend were enormously valuable.

3) As evidenced in the February program, the presence of numerous experienced facilitators at all times (particularly at challenge sites) throughout the weekend was crucial for monitoring program delivery, and it is our recommendation that the presence of these experienced facilitators should continue as a minimum of one person directing the program and at least one facilitator at each challenge site at all times.

4) Volunteer training and supervision would contribute greatly to improving program logistics, however, some issues remain. In open-ended responses, several youth

from the September group raised concerns about a lack of integration between the sexes (boys and girls were kept apart until the last day of the program). Indeed, such an approach runs contrary to the philosophy of providing experiences with diverse youth and bridging differences. Indeed, even the activities for boys and girls were different, with a particularly salient moment of “unfairness” arising when the boys-only medieval sword-fight took place near and during the girls’ ‘sharing’ ceremony. These types of inequities would do more to exacerbate than overcome differences. Thus, either the programs should be conducted separately for boys and girls (as was done in the February all-girl session), or if both are included, care should be taken to maintain equal opportunity in activities for boys and girls.

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## Appendix A Parental Informed Consent for Program Youth

Dear Parents:

We are a team of researchers at Carleton University, and have been invited by Dr. Brian Bailey to study some of the experiences the Young Canadian Leadership Challenge (YCLC) may provide youth. We are interested in measuring youths' initiative (how they approach their daily activities), how they feel about themselves and others, and what strategies they use to deal with various situations. It is also hoped that this project will lead to a better understanding of some the experiences programs like YCLC may provide for youth. We would like to include your son or daughter in this study.

We are interested in the group of responses as a whole from youth in this program, and we're not interested in your child's individual responses. Our surveys do not ask anything related to intelligence.

Our study involves a series of questionnaires for youth to fill out. There will be an opportunity to fill out one set of surveys right when they arrive at Econiche House, and another opportunity at the very end of the program. It will be made clear to your child that there are no right or wrong answers to these questionnaires, and that they may skip questions that make them feel uncomfortable, or stop at anytime without any negative consequences. Nobody else but the research team will see your child's completed questionnaire.

Finally, we are asking for permission to contact your child in three months time (around the end of November) for a brief interview (about 45 minutes). This interview will consist of the same types of questions completed during earlier points in the study. The main difference is that one of us will be there to facilitate and answer questions. The interview can be scheduled when and where it is convenient for your child and yourself.

This study has been officially approved by YCLC program facilitators and Carleton University's ethics committee. When the study is complete, a summary of the findings will be available to parents who are interested. This study is being used as Robin's Master's Thesis and Sarah's Honours Thesis, and possibly for publication in an academic journal.

Please complete the form and have your child **bring it with them** to the YCLC weekend.

We sincerely appreciate your cooperation. If you would like more information about the study, please contact Robin (613-520-2600 X2683) or by email at [rwestmac@connect.carleton.ca](mailto:rwestmac@connect.carleton.ca), Sarah (520-2600, X2683, Email: [sarahmel\\_82@yahoo.ca](mailto:sarahmel_82@yahoo.ca)) or Dr. Matheson (Tel: 520-2684 Email: [kimmatheson@pigeon.carleton.ca](mailto:kimmatheson@pigeon.carleton.ca)). If you have ethical concerns about how this study is conducted, contact Dr. C. Davis, Chair of the Carleton University Research Ethics Committee for Psychological Research, 520-2600, ext. 2251 or Dr. M. Gick, Acting Chair, Department of Psychology, Carleton University, 520-2648.

Thank you,

Robin Westmacott  
Graduate Student  
Dept. of Psychology  
Carleton University

Sarah LaFrance  
4<sup>th</sup> Year Honours Student  
Dept. of Psychology  
Carleton University

Dr. Kimberly Matheson  
Professor  
Dept. of Psychology  
Carleton University

Child's Name \_\_\_\_\_

*Check here*

I give permission for my child to participate in the Carleton University study  
I do **NOT** give permission for my child to participate in the Carleton University study  
(Please note that if your child does not participate in this study, the program facilitators will provide him or her with other activities during this time so that s/he does not feel excluded).

Signature of Parent/guardian \_\_\_\_\_ Date \_\_\_\_\_

**PLEASE HAVE YOUR CHILD BRING THIS TO THE YCLC WEEKEND**

**Appendix B****Program Youth Pretest Informed Consent****Name** \_\_\_\_\_**Youth Permission Form**

I understand that I have been asked to be in a research study that students from Carleton University are doing about how children and youth feel about what they are doing in their lives, how they feel about themselves, and how they feel about others.

I know that if I agree to be in the study I will be asked to fill in some questionnaires about myself, and my everyday experiences, and that these questionnaires will take about 30 minutes. I also know that I will be asked to complete another shorter questionnaire at the end of the weekend, and that I might be contacted again in 3 months for an interview.

I know that I do not have to be in the study and that even if I start to take part in it, I can quit at any time, without any negative consequences. I also don't have to answer certain questions if I don't like them.

I know that I can ask questions about the study before I participate.

I also know that my answers will be kept secret and will not be shown to anyone, not even my teachers or my parents, or anyone at the Young Canadian Leadership Challenge weekend. Only the research team from Carleton University will know what I say on the questionnaire.

Sign your name: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix C

### Program Youth Pretest Verbal Informed Consent

Hi guys,

We are students from Carleton University, and we're doing a study on the kids at this leadership weekend. We're interested in your opinions about some things. We're asking for you to help us by filling out some surveys for us. These surveys will ask you some questions about yourself, how you feel about other people, and some questions about your daily activities. You might find this really neat and learn something about yourself. It's definitely not a test – so there are no right or wrong answers. But we need you to be honest and put down what you really think, as this is your chance to take part in research that will help this program.

Your participation is voluntary – meaning that you don't have to do this if it makes you feel uncomfortable or for any reason. You may ask one of us for something to do if you don't want to do this.

When we give you the survey package, please put your name only on the first page and go through the surveys in order (so, please don't go to the back and finish that part before you do the front).

Please feel free to ask any of us for help! That's what we're here for.

Thank you!

**Appendix D**  
**Program Youth Instructions (Pretest and Follow-up)**

## Directions

**Answer each question as honestly as you possibly can. Remember, this is your chance to help make this program better.**

**This is not a test! We are just interested in your opinions and feelings.**

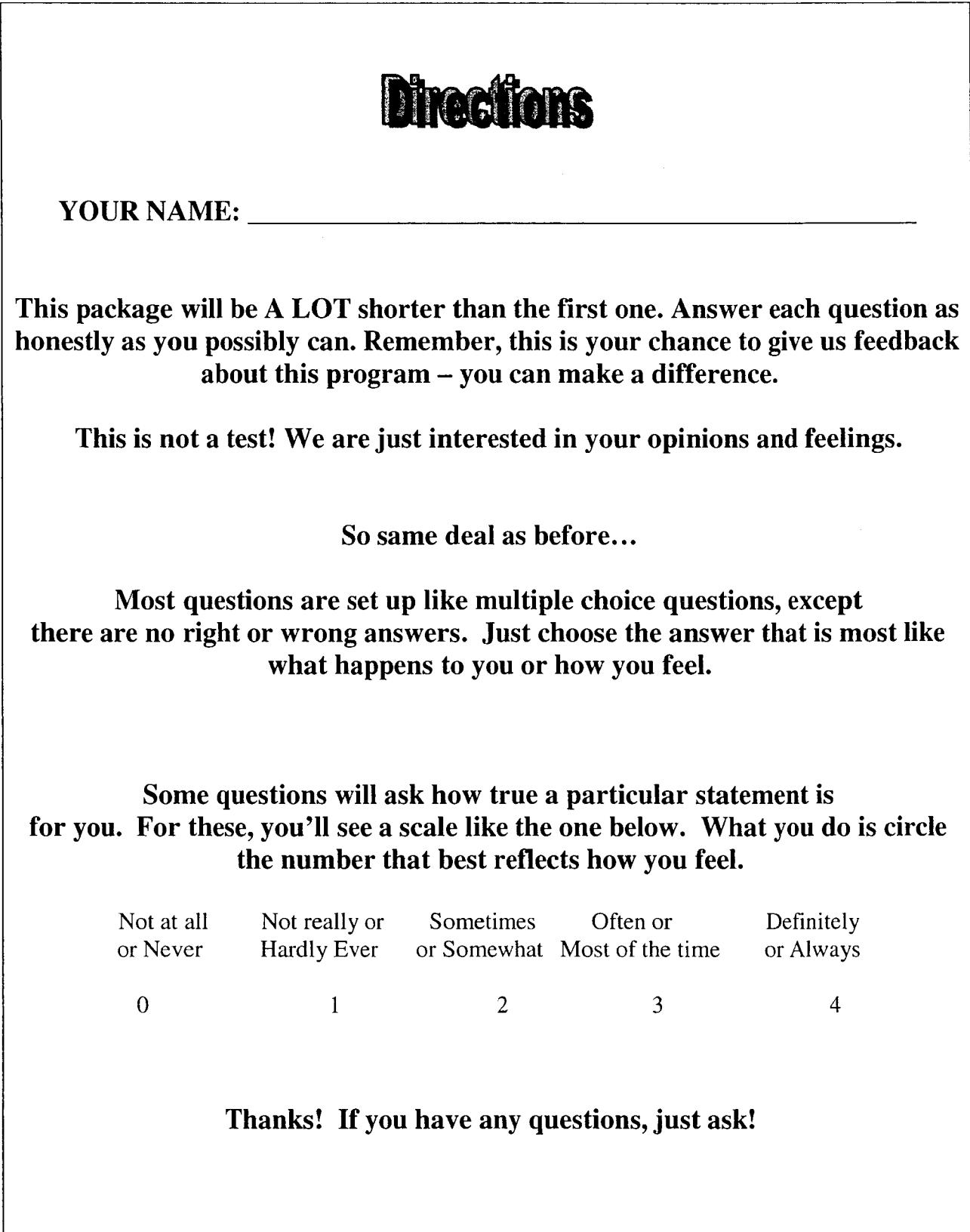
**Most questions are set up like multiple choice questions, except there are no right or wrong answers. Just choose the answer that is most like what happens to you or how you feel.**

**Some questions will ask how true a particular statement is for you. For these, you'll see a scale like the one below. What you do is circle the number that best reflects how you feel.**

Not at all or Never	Not really or Hardly Ever	Sometimes or Somewhat	Often or Most of the time	Definitely or Always
0	1	2	3	4

**Thanks! If you have any questions, just ask!**

## Appendix E Program Youth Instructions (Posttest)



## Directions

**YOUR NAME:** \_\_\_\_\_

**This package will be A LOT shorter than the first one. Answer each question as honestly as you possibly can. Remember, this is your chance to give us feedback about this program – you can make a difference.**

**This is not a test! We are just interested in your opinions and feelings.**

**So same deal as before...**

**Most questions are set up like multiple choice questions, except there are no right or wrong answers. Just choose the answer that is most like what happens to you or how you feel.**

**Some questions will ask how true a particular statement is for you. For these, you'll see a scale like the one below. What you do is circle the number that best reflects how you feel.**

Not at all or Never	Not really or Hardly Ever	Sometimes or Somewhat	Often or Most of the time	Definitely or Always
0	1	2	3	4

**Thanks! If you have any questions, just ask!**

## Appendix F Program Youth Debriefing

### **You're finished! Thank you!**

In our study, we are trying to link some of the experiences you've had this weekend with how you feel about your daily activities and plans, how you feel about yourself, and how you feel about other people. We are looking at what different people got out of the program, and whether it has changed any of the ways you think about things. Now we have your first impressions. We're hoping to be able to talk to you in few months to see how you feel then too, and whether anything has changed. By then, we might be able to tell you more about some of what we've discovered.

In the meantime, we want you to know that if you are having difficulty in your life or with other people, or are feeling low or sad a lot, please know that there is help out there for you. If you are not already receiving help, you can talk to any adult that you trust – a parent, counselor, a teacher or coach, a youth worker, a bus driver, etc.

If you would like help from someone outside your family or school, you could call one of the following help lines.

(1-800 numbers can be called FREE from payphones, no money needed):

Kids Help Phone	1-800-668-6868
Family Service Canada	1-800-668-7808
Youth Against Violence	1-800-680-4264
Distress Centre of Ottawa	(613) 238-3311

If you have more questions about the study, you can phone or email any of us.

Robin Westmacott	520-2600 X2683	rwestmac@connect.carleton.ca
Sarah Lafrance	520-2600 X7513	sarahmel_82@yahoo.ca
Dr. Matheson	520-2684	kimmatheson@pigeon.carleton.ca

If you feel uncomfortable about questions you answered or how we conducted the study, please feel free to contact the psychology department at Carleton.

Dr. Mary Gick	520-2648	Chair of the Department
Dr. Chris. Davis	520-2251	Chair of the Ethics Committee

## Appendix G Demographics

**Information about You**

1. What grade are you going into? Grade: \_\_\_\_\_
2. Are you male or female? Check one:  male  female
3. How old are you? Age: \_\_\_\_\_
4. What is your first language (the first one you learned to speak)? \_\_\_\_\_
5. Can you read and write easily in English?  Yes  No  Somewhat
6. How many years have you lived in Canada?  All my life  Part of my life: \_\_\_\_\_ years

7. People sometimes identify themselves by race or the colour of their skin.  
How do you identify yourself? (Check more than one if appropriate.)

- African/Caribbean (Black)  
 Asian (Chinese, Japanese, Vietnamese, Korean, etc.)  
 Caucasian (White)  
 First Nations (Native, Indian, Aboriginal)  
 South Asian (Indo-Canadian, East Indian, Pakistani, etc.)  
 Other (please describe) \_\_\_\_\_  
 I don't know

8. What kind of "extra curricular", summer, social, or after-school activities do you usually participate in? (please list):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Appendix H  
***ME or NOT ME***

*How much does the word on the left describe you? Circle only one number.*

NOT ME	RARELY	SOMETIMES	OFTEN	ALWAYS
ME	ME	ME	ME	ME



Bored.....

1	2	3	4	5
---	---	---	---	---



A Hero.....

1	2	3	4	5
---	---	---	---	---



Frustrated.....

1	2	3	4	5
---	---	---	---	---



Happy.....

1	2	3	4	5
---	---	---	---	---



Curious.....

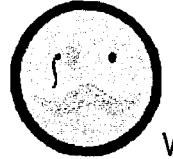
1	2	3	4	5
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Brave.....

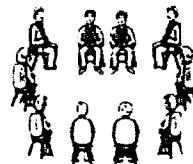
1	2	3	4	5
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	Caring.....	1	2	3	4	5
	Lonely.....	1	2	3	4	5
	Loyal.....	1	2	3	4	5
	Honest.....	1	2	3	4	5
	A good team member.....	1	2	3	4	5
	Someone who can be trusted..	1	2	3	4	5
	Someone who includes others in the fun.	1	2	3	4	5
	Someone who "steps up to the challenge".	1	2	3	4	5
	Someone who explains my ideas well....	1	2	3	4	5
	A leader.....	1	2	3	4	5

	Creative.....	1	2	3	4	5
	Forgiving.....	1	2	3	4	5
	Wise.....	1	2	3	4	5
	Afraid.....	1	2	3	4	5
	Proud.....	1	2	3	4	5
	Excited.....	1	2	3	4	5
	Responsible.....	1	2	3	4	5
	Sad.....	1	2	3	4	5

**Appendix I**  
**Inclusion of Other in the Self**

We all know different people. We feel really close to some people, but distant from others. We also know of groups that people belong to. Some of these groups make us spend our time together (a sports team, computer club, a clique at school). Other groups we just belong to from the beginning (Canadians, family, etc.). We feel closer or more part of some groups than others.

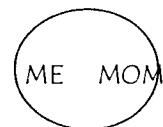
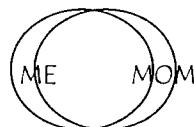
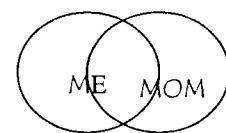
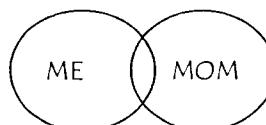
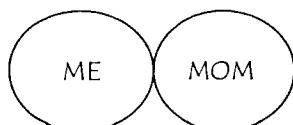


**DIRECTIONS:**

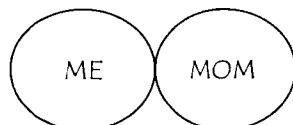
For each question, there are FIVE pictures to choose from. Please choose the picture that is most like how you feel. Mark an "X" on the picture you choose.

**For example:**

Please choose the picture that is most like how you feel about **your mom**:



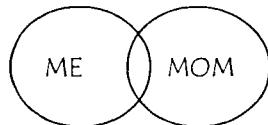
If you and your mom are *not alike at all*, you might choose this picture:



But, if you and your mom are *very, very close*, you might choose this picture:



If you and your mom are *just a little alike*, you might choose this picture:

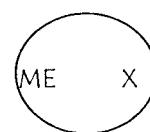
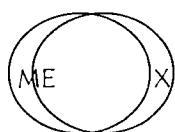
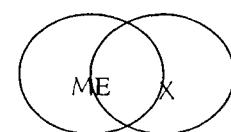
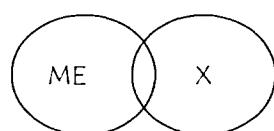
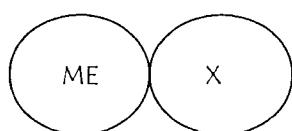


Get the idea?

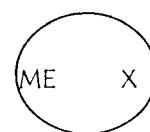
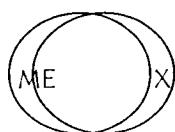
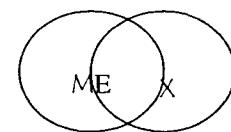
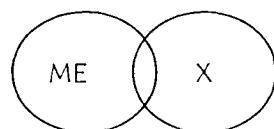
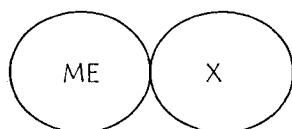
Remember, you decide! **Just go with how you feel, not how you think others want you to feel.**

OK, we're going to really start now.....from now on, just the "ME" circle will be labelled. Of course, that circle stands for you. The other circle will be labelled with an "X", so please imagine that the "X" stands for the other person or group **in bold**. Mark the picture you choose with an "X".

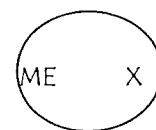
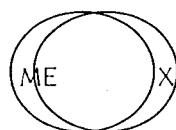
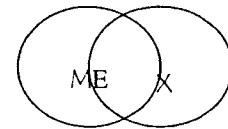
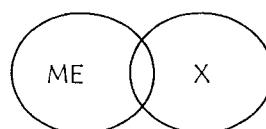
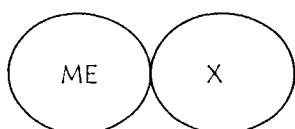
1. Please choose the picture that is most like how you feel about **the other youth at this weekend**:



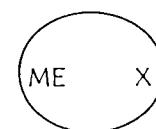
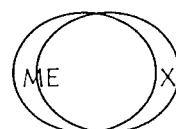
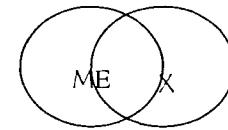
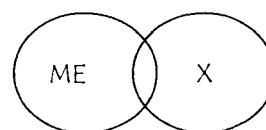
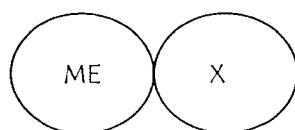
2. Please choose the picture that is most like how you feel about **a person who wears a totally different style of clothes than you do**:



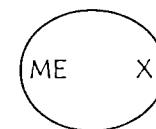
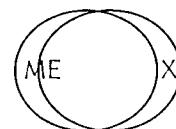
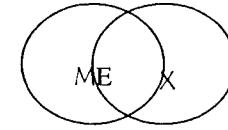
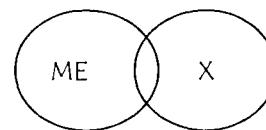
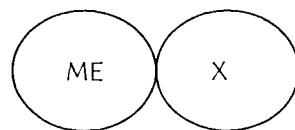
3. Please choose the picture that is most like how you feel about **a youth who has an accent that is different from your own:**



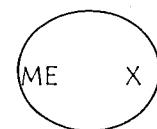
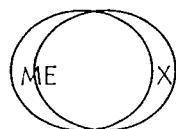
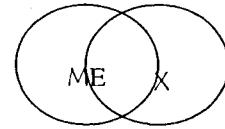
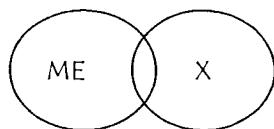
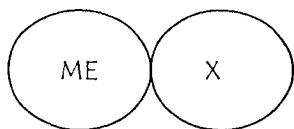
4. Please choose the picture that is most like how you feel about **a youth whose family has a lot less money than yours does:**



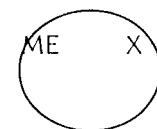
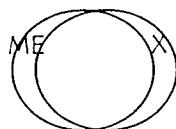
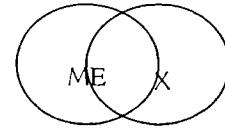
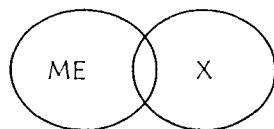
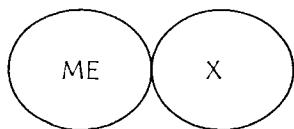
5. Please choose the picture that is most like how you feel about **a youth who gets bullied and teased:**



6. Please choose the picture that is most like how you feel about **a youth who bullies and teases other kids**:



7. Please choose the picture that is most like how you feel about **a youth whose skin is a different colour than yours**:



## Appendix J1 Program Youth

Youth Experiences Survey (YES)

**Instructions:** Please rate whether you have had the following experiences during *this weekend at The Young Canadian Leadership Challenge® (YCLC)*.

Your Experiences In.....			
<i>The Young Canadian Leadership Challenge® (YCLC)</i>			
Not at all	A little	Quite a bit	Yes, totally

1. Tried doing new things	1	2	3	4
2. Tried a new way of acting around people	1	2	3	4
3. I did things here I don't get to do anywhere else	1	2	3	4
4. Started thinking more about my future because of this activity	1	2	3	4
5. YCLC got me thinking about who I am	1	2	3	4
6. YCLC has been a positive turning point in my life	1	2	3	4
7. I set goals for myself during YCLC	1	2	3	4
8. Learned to find ways to achieve my goals	1	2	3	4
9. Learned to consider obstacles when making plans	1	2	3	4
10. I put all my energy into the challenges at YCLC	1	2	3	4
11. Learned to push myself	1	2	3	4
12. Learned to focus my attention	1	2	3	4
<b>Problem Solving</b>				
13. Observed how others solved problems and learned from them	1	2	3	4
14. Learned about developing plans for solving a problem	1	2	3	4
15. Used my imagination to solve a problem	1	2	3	4
<b>Managing time</b>				
16. Learned about organizing time and not procrastinating (not putting things off)	1	2	3	4
17. Learned about setting priorities	1	2	3	4
18. Practiced self discipline	1	2	3	4

<b>Dealing with emotions</b>	Not at all	A little	Quite a bit	Yes, totally
19. Learned about controlling my temper	1	2	3	4
20. Became better at dealing with fear and anxiety	1	2	3	4
21. Became better at handling stress	1	2	3	4
22. Learned that my emotions affect how I perform	1	2	3	4

<b>Making Friends</b>	1	2	3	4
23. Made friends with someone of the opposite gender	1	2	3	4
24. Learned I had a lot in common with people from different backgrounds	1	2	3	4
25. Got to know someone from a different culture	1	2	3	4
26. Made friends with someone from a different social class (someone richer or poorer)	1	2	3	4

<b>What I Believe in</b>	1	2	3	4
27. Learned about helping others	1	2	3	4
28. Learned to stand up for something I believed was right	1	2	3	4
29. We talked about morals and values	1	2	3	4

<b>Teamwork</b>	1	2	3	4
30. Learned that working together takes some compromising	1	2	3	4
31. Became better at sharing responsibility	1	2	3	4
32. Learned to be patient with other group members	1	2	3	4
33. Learned how my emotions and attitude affect others in the group	1	2	3	4
34. Learned that you don't have to like people in order to work with them	1	2	3	4
35. I became better at giving feedback (letting others know how they're doing and acting)	1	2	3	4
36. I became better at taking feedback	1	2	3	4

<b>Things that weren't fun</b>	1	2	3	4
37. YCLC has stressed me out	1	2	3	4
38. Felt pressured by peers to do something I didn't want to do				
39. I did something at YCLC that was morally wrong	1	2	3	4
40. I was ridiculed by peers for something I did this weekend	1	2	3	4
41. Felt like I didn't belong at YCLC	1	2	3	4
42. I felt left out	1	2	3	4
43. There were cliques in the YCLC	1	2	3	4
44. I got stuck doing more than my fair share	1	2	3	4

## Appendix J2 Comparison Participants

Youth Experiences Survey (YES)

**Instructions:** Please rate whether you have had the following experiences in *this activity*:

Your Experiences In.....			
Not at all	A little	Quite a bit	Yes, totally

1. Tried doing new things	1	2	3	4
2. Tried a new way of acting around people	1	2	3	4
3. I did things here I don't get to do anywhere else	1	2	3	4
4. Started thinking more about my future because of this activity	1	2	3	4
5. This activity got me thinking about who I am	1	2	3	4
6. This activity has been a positive turning point in my life	1	2	3	4

7. I set goals for myself during this activity	1	2	3	4
8. Learned to find ways to achieve my goals	1	2	3	4
9. Learned to consider obstacles when making plans	1	2	3	4

10. I put all my energy into the challenges at this activity	1	2	3	4
11. Learned to push myself	1	2	3	4
12. Learned to focus my attention	1	2	3	4

<b>Problem Solving</b>				
13. Observed how others solved problems and learned from them	1	2	3	4
14. Learned about developing plans for solving a problem	1	2	3	4
15. Used my imagination to solve a problem	1	2	3	4

<b>Managing time</b>				
16. Learned about organizing time and not procrastinating (not putting things off)	1	2	3	4
17. Learned about setting priorities	1	2	3	4
18. Practiced self discipline	1	2	3	4

<b>Dealing with emotions</b>	<b>Not at all</b>	<b>A little</b>	<b>Quite a bit</b>	<b>Yes, totally</b>
19. Learned about controlling my temper	1	2	3	4
20. Became better at dealing with fear and anxiety	1	2	3	4
21. Became better at handling stress	1	2	3	4
22. Learned that my emotions affect how I perform	1	2	3	4

<b>Making Friends</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
23. Made friends with someone of the opposite gender	1	2	3	4
24. Learned I had a lot in common with people from different backgrounds	1	2	3	4
25. Got to know someone from a different culture	1	2	3	4
26. Made friends with someone from a different social class (someone richer or poorer)	1	2	3	4

<b>What I Believe in</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
27. Learned about helping others	1	2	3	4
28. Learned to stand up for something I believed was right	1	2	3	4
29. We talked about morals and values	1	2	3	4

<b>Teamwork</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
30. Learned that working together takes some compromising	1	2	3	4
31. Became better at sharing responsibility	1	2	3	4
32. Learned to be patient with other group members	1	2	3	4
33. Learned how my emotions and attitude affect others in the group	1	2	3	4
34. Learned that you don't have to like people in order to work with them	1	2	3	4
35. I became better at giving feedback (letting others know how they're doing and acting)	1	2	3	4
36. I became better at taking feedback	1	2	3	4

<b>Things that weren't fun</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
37. YCLC has stressed me out	1	2	3	4
38. Felt pressured by peers to do something I didn't want to do				
39. I did something at this activity that was morally wrong	1	2	3	4
40. I was ridiculed by peers for something I did this weekend	1	2	3	4
41. Felt like I didn't belong at this activity	1	2	3	4
42. I felt left out	1	2	3	4
43. There were cliques in this activity	1	2	3	4
44. I got stuck doing more than my fair share	1	2	3	4

## Appendix K

***PERSONAL PROJECTS***

- *We are interested in the kinds of things you are doing day to day or planning to do.*
- *We call these activities or plans == personal projects*

*Here are some examples of what we mean by personal projects:*

*Trying out for the basketball team  
 Trying to talk to my mother  
 Decorating my room  
 Passing this school grade  
 Finishing my science project  
 Trying to listen to my parents*

*Directions:*

- *Please begin by writing down as many projects as you can think of. Remember these do not have to be important things you are planning. Just list interests and activities that are part of your everyday life.*

**WAIT!**

***PLEASE WAIT FOR THE RESEARCHERS TO SAY GO! (SO WE CAN TIME EVERYONE TOGETHER FOR THREE MINUTES).***

*OK...*

# **TURN THE PAGE!!!**

## *List of Projects*

*Please go ahead and write down as many as you can in FIVE minutes:*

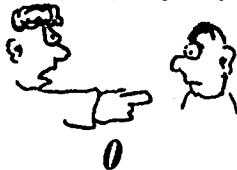
- **NOW – From this list choose the most important FOUR or the main projects and write them over here, on the lines (one project each line!)**



- *We also want to know how you feel about your projects. On the following pages you will be asked questions about your projects. We'd like you to answer these questions by coloring in a number for each project from 0 – 10.*

## ***CONTROL***

*Some of our projects are run by other people and we may feel like we have little control over them. Other projects feel like they are totally under our control. How much do you feel you are in control of each project?*



*(very little control)*



*10*

*(I have total control)*

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
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①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

## **YOUR IDEA**

*Sometimes we decide totally on our own to take on a project but sometimes it is someone else's idea that we do that project- or it is given to us. How much is each project something you decided to do?*



**0**

*(someone else's idea)*

**10**

*(your idea)*

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

0	1	2	3	4	5	6	7	8	9	10
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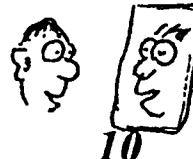
0	1	2	3	4	5	6	7	8	9	10
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## **LIKE YOU**

*We all do things that are typical of us - people will say "it is like her to do that". If you read a lot, play a lot of sports or like to dance, for example, people will say "yes that is just like him to be playing sports". How typical or how much like you is each of your projects?*



*(not like you at all)*



*(just like you)*

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

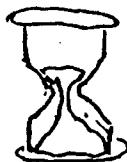
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
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①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
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①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

## TIME

We may spend enough time on some of our projects but not enough time on others.  
How much do you feel you spend enough time on each project?



0

(not enough time at all)



10

(totally enough time)

0	1	2	3	4	5	6	7	8	9	10
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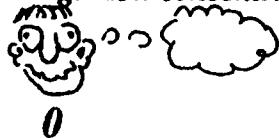
0	1	2	3	4	5	6	7	8	9	10
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0	1	2	3	4	5	6	7	8	9	10
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0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

## **CONCENTRATED**

*When we are thinking about or doing some projects we are totally involved in what we are doing and may not even hear the telephone ring. When doing other projects we are easily distracted by almost anything and it is hard to concentrate on what we are doing. How concentrated are you when you are doing each of your projects?*



*(not at all)*



*(totally concentrated)*

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
---	---	---	---	---	---	---	---	---	---

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
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## Appendix L Qualitative Survey for Program Youth

Think back to a time before the Young Canadian Leadership Weekend. Why did you decide to come to the weekend? Please check as many as apply to you.

- a) \_\_\_\_\_ My parents forced me to go
- b) \_\_\_\_\_ Acting, theatre, and the middle ages are fun
- c) \_\_\_\_\_ I like adventure and role-playing games
- d) \_\_\_\_\_ I wanted to make new friends
- e) \_\_\_\_\_ If there is another reason, please tell us here:  
\_\_\_\_\_  
\_\_\_\_\_

What, if anything, did you learn from being at the weekend?

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Some kids say that they feel they are a different person since the weekend. For example, they say they are more excited about their own activities and are better able to finish them.

Did this happen for you? Can you give an example of when you noticed this?

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If you think that you did change, even a little bit, what is it about you that you think is different ever since the weekend?

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Some kids say that the weekend gave them a chance to meet people from other cultures, or people they wouldn't normally hang around with.

Did this happen for you? Can you give an example of when this happened at the weekend?

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If you could have changed something about that weekend that you thought either maybe shouldn't have been done at all, could have been done better, or something you think could have been done instead, what would that be?

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**Appendix M****Program Youth Follow-up Informed Consent****Name** \_\_\_\_\_**Youth Permission Form**

I understand that I have been asked to be in a research study that students from Carleton University are doing about how children and youth feel about what they are doing in their lives, how they feel about themselves, and how they feel about others.

I know that if I agree to be in the study I will be asked to fill in some questionnaires about myself, and my everyday experiences, and that these questionnaires will take about 30 minutes.

I know that I do not have to be in the study and that even if I start to take part in it, I can quit at any time, without any negative consequences. I also don't have to answer certain questions if I don't like them.

I know that I can ask questions about the study before I participate.

I also know that my answers will be kept secret and will not be shown to anyone, not even my teachers or my parents, or anyone who was at the Young Canadian Leadership Challenge weekend. Only the research team from Carleton University will know what I say on the questionnaire.

Sign your name: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix N Program Youth Debriefing (Follow-up)

**You're finished! Thank you!**

In our study, we are trying to link some of the experiences you've had at the Young Canadian Leadership Weekend with how you feel about your daily activities and plans, how you feel about yourself, and how you feel about other people. We are looking at what different people got out of the program, and whether it has changed any of the ways you think about things. For example, we are looking at whether youth have gained new ways of dealing with their problems (coping skills), self-esteem (better feelings about themselves), their attitudes toward different cultures, and the initiative they show (starting and finishing their activities).

We want you to know that if you are having difficulty in your life or with other people, or are feeling low or sad a lot, please know that there is help out there for you. If you are not already receiving help, you can talk to any adult that you trust – a parent, counselor, a teacher or coach, a youth worker, a bus driver, etc.

If you would like help from someone outside your family or school, you could call one of the following help lines.

(1-800 numbers can be called FREE from payphones, no money needed):

Kids Help Phone	1-800-668-6868
Family Service Canada	1-800-668-7808
Youth Against Violence	1-800-680-4264
Distress Centre of Ottawa	(613) 238-3311

If you have more questions about the study, you can phone or email any of us.

Robin Westmacott	520-2600 X2683	rwestmac@connect.carleton.ca
Sarah Lafrance	520-2600 X7513	sarahmel_82@yahoo.ca
Dr. Matheson	520-2684	kimmatheson@pigeon.carleton.ca

If you feel uncomfortable about questions you answered or how we conducted the study, please feel free to contact the psychology department at Carleton.

Dr. Mary Gick	520-2648	Chair of the Department
Dr. Chris. Davis	520-2251	Chair of the Ethics Committee

**THANK YOU FOR COMPLETING THIS SURVEY!!!!!!**

## Appendix O1

(Letter to community centres/organizations to recruit comparison participants)

Dear *Organization*:

We are a team of researchers at Carleton University, and we are studying some of the experiences and skills that extra-curricular activities (e.g., drama and sports) may provide youth. We are interested in measuring youths' initiative (how they approach their daily activities), how they feel about themselves and others, and what strategies they use to deal with various situations. It is also hoped that this project will lead to a better understanding of some the experiences extra-curricular activities may provide for youth. We would like to include participants of *activity*.

We are interested in the group of responses as a whole from youth in these activities, and we're not interested individual responses or your group in particular. Our surveys do not ask anything related to intelligence.

Our study involves two sets of questionnaires for youth to fill out. There will be an opportunity to fill out the first set of surveys as soon as possible. It will be made clear to youth participants that there are no right or wrong answers to these questionnaires, and that they may skip questions that make them feel uncomfortable, or stop at anytime without any negative consequences. Nobody else but the research team will see youth participants' completed questionnaires.

This study has been officially approved by Carleton University's ethics committee. When the study is complete, a summary of the findings will be available to parents who are interested. This study is being used as Robin's Master's Thesis and Sarah's Honours Thesis, and possibly for publication in an academic journal.

We sincerely appreciate your cooperation. If you would like more information about the study, please contact Robin (613-520-2600 X2683) or by email at [rwestmac@connect.carleton.ca](mailto:rwestmac@connect.carleton.ca), Sarah (520-2600, X2683, Email: [sarahmel\\_82@yahoo.ca](mailto:sarahmel_82@yahoo.ca)) or Dr. Matheson (Tel: 520-2684 Email: [kimmatheson@pigeon.carleton.ca](mailto:kimmatheson@pigeon.carleton.ca)). If you have ethical concerns about how this study is conducted, contact Dr. C. Davis, Chair of the Carleton University Research Ethics Committee for Psychological Research, 520-2600, ext. 2251 or Dr. M. Gick, Acting Chair, Department of Psychology, Carleton University, 520-2648.

Thank you,

Robin Westmacott  
Graduate Student  
Dept. of Psychology  
Carleton University

Sarah LaFrance  
4<sup>th</sup> Year Honours Student  
Dept. of Psychology  
Carleton University

Dr. Kimberly Matheson  
Professor  
Dept. of Psychology  
Carleton University

Signature of representative of *Organization* \_\_\_\_\_ Date \_\_\_\_\_

## Appendix O2

(Letter to activity group leaders to recruit comparison participants)

Dear *Group leader*:

We are a team of researchers at Carleton University, and we are studying some of the experiences and skills that extra-curricular activities (e.g., drama and sports) may provide youth. We are interested in measuring youths' initiative (how they approach their daily activities), how they feel about themselves and others, and what strategies they use to deal with various situations. It is also hoped that this project will lead to a better understanding of some the experiences extra-curricular activities may provide for youth. We would like to include participants of *activity*.

We are interested in the group of responses as a whole from youth in these activities, and we're not interested individual responses or your group in particular. Our surveys do not ask anything related to intelligence.

Our study involves two sets of questionnaires for youth to fill out. There will be an opportunity to fill out the first set of surveys as soon as possible. It will be made clear to youth participants that there are no right or wrong answers to these questionnaires, and that they may skip questions that make them feel uncomfortable, or stop at anytime without any negative consequences. Nobody else but the research team will see youth participants' completed questionnaires.

This study has been officially approved by Carleton University's ethics committee. When the study is complete, a summary of the findings will be available to parents who are interested. This study is being used as Robin's Master's Thesis and Sarah's Honours Thesis, and possibly for publication in an academic journal.

We sincerely appreciate your cooperation. If you would like more information about the study, please contact Robin (613-520-2600 X2683) or by email at [rwestmac@connect.carleton.ca](mailto:rwestmac@connect.carleton.ca), Sarah (520-2600, X2683, Email: [sarahmel\\_82@yahoo.ca](mailto:sarahmel_82@yahoo.ca)) or Dr. Matheson (Tel: 520-2684 Email: [kimmatheson@pigeon.carleton.ca](mailto:kimmatheson@pigeon.carleton.ca)). If you have ethical concerns about how this study is conducted, contact Dr. C. Davis, Chair of the Carleton University Research Ethics Committee for Psychological Research, 520-2600, ext. 2251 or Dr. M. Gick, Acting Chair, Department of Psychology, Carleton University, 520-2648.

Thank you,

Robin Westmacott  
Graduate Student  
Dept. of Psychology  
Carleton University

Sarah LaFrance  
4<sup>th</sup> Year Honours Student  
Dept. of Psychology  
Carleton University

Dr. Kimberly Matheson  
Professor  
Dept. of Psychology  
Carleton University

Signature of group leader \_\_\_\_\_ Date \_\_\_\_\_

## Appendix P Comparison Youth Parent Informed Consent

Dear Parents:

We are a team of researchers at Carleton University, and we are studying some of the experiences and skills that extra-curricular activities (e.g., drama, sports, or specialty programs) may provide youth. We are interested in measuring youths' initiative (how they approach their daily activities), how they feel about themselves and others, and what strategies they use to deal with various situations. It is also hoped that this project will lead to a better understanding of some the experiences extra-curricular activities may provide for youth. We would like to include your son or daughter in this study.

We are interested in the group of responses as a whole from youth in these activities, and we're not interested in your child's individual responses. Our surveys do not ask anything related to intelligence.

Our study involves two sets of questionnaires for youth to fill out. There will be an opportunity to fill out the first set of surveys as soon as possible. It will be made clear to your child that there are no right or wrong answers to these questionnaires, and that they may skip questions that make them feel uncomfortable, or stop at anytime without any negative consequences. Nobody else but the research team will see your child's completed questionnaire.

This study has been officially approved by Carleton University's ethics committee and Overbrooke Community Centre. When the study is complete, a summary of the findings will be available to parents who are interested. This study is being used as Robin's Master's Thesis and Sarah's Honours Thesis, and possibly for publication in an academic journal.

Please complete the form and have your child **bring it with them** to Overbrooke Community Centre at your earliest convenience.

We sincerely appreciate your cooperation. If you would like more information about the study, please contact Robin (613-520-2600 X2683) or by email at [rwestmac@connect.carleton.ca](mailto:rwestmac@connect.carleton.ca), Sarah (520-2600, X2683, Email: [sarahmel\\_82@yahoo.ca](mailto:sarahmel_82@yahoo.ca)) or Dr. Matheson (Tel: 520-2684 Email: [kimmatheson@pigeon.carleton.ca](mailto:kimmatheson@pigeon.carleton.ca)). If you have ethical concerns about how this study is conducted, contact Dr. C. Davis, Chair of the Carleton University Research Ethics Committee for Psychological Research, 520-2600, ext. 2251 or Dr. M. Gick, Chair, Department of Psychology, Carleton University, 520-2648.

Thank you,

Robin Westmacott  
Graduate Student  
Dept. of Psychology  
Carleton University

Sarah LaFrance  
4<sup>th</sup> Year Honours Student  
Dept. of Psychology  
Carleton University

Dr. Kimberly Matheson  
Professor  
Dept. of Psychology  
Carleton University

Child's Name \_\_\_\_\_

*Check here*

I give permission for my child to participate in the Carleton University study  
I do **NOT** give permission for my child to participate in the Carleton University study

Signature of Parent/guardian \_\_\_\_\_ Date \_\_\_\_\_

## Appendix Q (Verbal recruitment script for comparison youth)

Hi guys,

We are students from Carleton University, and we're doing a study about youth and extra-curricular activities (like sports or drama). We're interested in your opinions about some things. We're asking for you to help us by filling out some surveys for us. These surveys will ask you some questions about yourself, how you feel about other people, and some questions about your daily activities. You might find this really neat and learn something about yourself. It's definitely not a test – so there are no right or wrong answers.

In order to take part in this study, you need to get your parents to sign a form, letting them know what you'll be involved in. Please ask them to sign it – either yes or no – and bring it back with you as soon as possible. Your participation is voluntary – meaning that you don't have to do this if it makes you feel uncomfortable or for any reason. We're just interested in getting those consent forms back – whether they say yes or no – so if at least  $\frac{3}{4}$  of youth in your group brings them back, pizza is on us.

Thank you!

## Appendix R Comparison Youth Informed Consent

**Name** \_\_\_\_\_**Youth Permission Form**

I understand that I have been asked to be in a research study that students from Carleton University are doing about how children and youth feel about what they are doing in their lives, how they feel about themselves, and how they feel about others.

I know that if I agree to be in the study I will be asked to fill in some questionnaires about myself, and my everyday experiences, and that these questionnaires will take about 30 minutes.

I know that I do not have to be in the study and that even if I start to take part in it, I can quit at any time, without any negative consequences. I also don't have to answer certain questions if I don't like them.

I know that I can ask questions about the study before I participate.

I also know that my answers will be kept secret and will not be shown to anyone, not even my teachers or my parents, or anyone here at **this activity**. Only the research team from Carleton University will know what I say on the questionnaire.

Sign your name: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix S Comparison Youth Debriefing

**You're finished! Thank you!**

In our study, we are trying to link some of the experiences you've had in this activity with how you feel about your daily activities and plans, how you feel about yourself, and how you feel about other people.

We want you to know that if you are having difficulty in your life or with other people, or are feeling low or sad a lot, please know that there is help out there for you. If you are not already receiving help, you can talk to any adult that you trust – a parent, counselor, a teacher or coach, a youth worker, a bus driver, etc.

If you would like help from someone outside your family or school, you could call one of the following help lines.

(1-800 numbers can be called FREE from payphones, no money needed):

Kids Help Phone	1-800-668-6868
Family Service Canada	1-800-668-7808
Youth Against Violence	1-800-680-4264
Distress Centre of Ottawa	(613) 238-3311

If you have more questions about the study, you can phone or email any of us.

Robin Westmacott	520-2600 X2683	rwestmac@connect.carleton.ca
Sarah Lafrance	520-2600 X7513	sarahmel_82@yahoo.ca
Dr. Matheson	520-2684	kimmatheson@pigeon.carleton.ca

If you feel uncomfortable about questions you answered or how we conducted the study, please feel free to contact the psychology department at Carleton.

Dr. Mary Gick	520-2648	Chair of the Department
Dr. Chris. Davis	520-2251	Chair of the Ethics Committee

**THANK YOU FOR COMPLETING THIS SURVEY!!!!!!**

## Appendix T

## Content Analysis Coding Scheme and Intercoder Reliabilities

<u>Categories</u>	<u>Coding Instructions</u>	#	$\alpha$
<u>Question 1</u>		23	.89
Friend's recommendation	Referral/invitation from a friend/friend was going to program/wanted to hang out with a friend who was attending		
Adult's recommendation	Counselor/principal/parent recommendation		
General self-interest	It looked fun/interest in program advertising and brochures/self-motivation		
Enjoyment of camping	Wanting to experience camping/sleeping in a tent/campfires/the outdoors		
Wanting a new experience	Attending because of wanting a new experience/to learn new things/new challenges		
<u>Question 2</u>		37	.83
Personal efficacy and/or knowledge	Includes allusions to gaining self-confidence/overcoming shyness/getting a better attitude/leadership/enjoyment of activities/conquering personal demons/bravery/courage/open-mindedness		
Teamwork	How to work with others/cooperation/trust in others as team members		
Appreciation for diversity	Appreciation for others/recognition or appreciation of different personalities		
Practical skills	Building things/how to camp/how to built a tent, etc.		
Nothing learned	Statements about how nothing was learned, including "not really"		
Other			

<u>Question 3</u>	17	.93
Initiative	Taking a leading role/starting or initiative own activities/statements related to using problem solving skills/effort/self-regulation/time management/not procrastinating/setting goals	
Enjoyment of activities	Enjoyment of learning/enjoying extra-curricular activities/greater enjoyment due to overcoming shyness or other interpersonal obstacles	
Other		
No	No/not really	
<u>Question 4</u>	37	.93
Assertiveness and extraversion	Sharing ideas/easier to talk to or in front of people/playing a role in group activities/assertiveness/overcoming shyness/curiosity/conquering fears/having courage	
Appreciation for others	Appreciating interpersonal differences/listening to others' ideas/appreciation for others' contributions/acceptance of others/open-minded to others' opinions/more open to friendships with diverse youth	
Motivation, effort and self-regulation	Perseverance/persistence/motivation to succeed/emotional regulation/self-reliance/how to react to tough situations and problems	
Positive behaviour and emotions	Being more kind to others/feeling better about oneself	
No changes or negative changes	Discussion of negative changes or the absence of change	
Other		
<u>Question 5</u>	35	1.00

I already know different types of people	Already hang around with different people/don't feel that camp contributed to meeting others more than other activities
Yes (but no specifics given)	Indication of meeting different people, but no specifics as to how the people were different/e.g., "I met some people I normally wouldn't talk to"
Yes (people from other cultures)	References to meeting youth from other cultures
No, this did not happen	Did not meet anyone different
Yes (people from other age groups)	Interacted with older and/or younger youth
Negative interaction	Fighting with other ethnic, age or other groups/groups divided

Question 6

42 1.00

Combine genders	Requesting to do activities with boys/activities that the boys did/for the program to be more equal between boys and girls
Age group	Requesting for a smaller age range/no younger kids/no older kids
Logistics	Complaints about food/tents/sleeping arrangements/communication, e.g. "if there were more supervisors who spoke French, it would have been better"/rules
Complaints about program activities and advertising	Complaints about being forced to participate or do things which made self uncomfortable/lack of accommodation for physical needs/complaints that program advertising was misleading
Activity requests	Requesting other activities/sports/games/free time
Personal behaviour	Personal regrets, e.g., "I should have talked more"
Change nothing	Well prepared/not wanting to change a thing
Behaviour of volunteers at	Lacking supervision/complaints about particular

program	facilitators or volunteers
Behaviour of program youth	Complaints about other program participants/conflict with program youth/harassment/bullying

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Note: # = number of coding units per question;  $\alpha$  = Krippendorf's  $\alpha$

## Appendix U Assumptions

Assumptions of linearity, normality and heteroscedasticity were examined for each of the variables to ensure that no serious violations of these assumptions were present. Examination of residual plots (plots of standardized residuals as a function of standardized predicted values) showed that all pairs of tested variables in regression were linearly related. Although pretest self-orientation and follow-up project concentration showed mild negative skewness, and posttest negative affect and follow-up project concentration showed mild positive kurtosis, none of these distributions was sufficiently skewed to consider transformations (i.e., z-scores did not exceed  $\pm 4$ ). Furthermore, regression analyses are robust to moderate violations of the normality assumption (Stevens, 2002).

A few outliers were present, however, none were extreme (beyond a z-score of  $\pm 4$ ) and none were found to be influential in altering the results of any analyses, and therefore all cases were retained. The presence of multicollinearity was examined in all regression analyses as its presence can make for ill-definable results of any analyses. No violations were observed.