

## Validating, Norming, and Utility of a Youth Outcomes Battery for Recreation Programs and Camps

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### Abstract

As the pressure for accountability and evidence-based practices grows, youth programs increasingly need to document outcome achievement, create logic models that imply causality, and demonstrate mechanisms that conceptually and empirically connect to a program's targeted outcomes. While programs need reliable and valid measures, they also need tools that can be customized, administered in the field, and tabulated and used to inform decisions in a timely manner. The Youth Outcomes Battery (YOB) seeks to fill this void by offering a recreation and camp program friendly tool that includes 11 subscales relevant to positive youth development. This study generally supports the construct, discriminant, and convergent validity of the YOB through an analysis of data from 3,750 youth representing 37 summer camps.

**Keywords:** *Youth outcomes, measurement, instrument validation*

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Accountability and evidence remain central to many evaluation efforts as recreation programs for youth seek to validate their efforts. This culture of accountability has pervaded many aspects of youth programming, especially areas targeting academic outcomes, seeking grant funding, or needing to compete with alternative programs for participants and resources. Funding agencies increasingly require systematic evaluation to both document outcomes and to support the creation of program theories and evidence-based practices for youth programs. Recreation programs are not unique in this need, but they are distinct in the types of outcomes they most naturally and inherently afford. Recreation programs, including youth summer camps, also lack a core curriculum, freeing programs to target some outcomes while deemphasizing others. The variety in curricula combined with the unpredictable settings and diversity of populations, made creating a singular unified outcome measure problematic.

Outcome research and evaluation on summer camps traditionally shows that youth benefit from the camp experience (e.g., ACA, 2005; Bialeschki, Henderson, & James, 2007; Henderson, Bialeschki, & James, 2007; Marsh, 1999; Mishna, Michalski, & Cummings, 2001; Readdick & Schaller, 2005; Yuen, Pedlar, & Mannell, 2005). However, many of these studies have been conducted by academics in partnership with camp programs, because research and evaluation are typically viewed by camps as complex and burdensome. To address these needs, the American Camp Association (ACA) began efforts to provide outcome assessment tools that were relevant, appropriate, and practical for use by recreation programs for youth.

The genesis of this study began when the ACA conducted a multiyear study to identify and measure summer youth program outcomes (ACA, 2005). That study was unprecedented in its size and scope, involving more than 5000 youth and their families from across the country. Ten key outcomes relevant to summer camps were identified and measured. Results showed youth development in several different domains, including: independence, self-esteem, confidence, social skills, exploration, and spirituality.

Despite the significance of this study, effect sizes were relatively small and the scale had several key limitations that necessitated additional work, which provided the genesis of the current ACA Youth Outcomes Battery (YOB). Currently in its second printing, the YOB is a battery of self-report instruments that can be easily administered to youth 10-17 years old, scored, and used by youth program professionals seeking an evidence-based outcome evaluation. The current version of the YOB has 11 subscales: Friendship Skills (FS), Family Citizenship Behavior (FCB), Responsibility (RESP), Independence (IND), Teamwork Skills (TW), Perceived Competence (COMP), Affinity for Exploration (AE), Affinity for Nature (AN), Problem Solving Confidence (PSC), Camp Connectedness (CC), and Spiritual Wellbeing (SWB; ACA, 2011). Because the YOB was created and tested as funding became available over a six year period, the purpose of this current study is to establish norms and provide further evidence of the construct validity for the YOB in a single, comprehensive effort.

### **Literature and Construct History**

As the YOB was being developed, special attention was given to measuring outcomes that were included as part of the original study (ACA, 2005), that might potentially be influenced by weeklong recreational experience, and that were needed by practitioners involved in programming for positive youth development. The ACA and its research committee were consistently involved in the initial instrument development and outcome selection. After selected for inclusion in the YOB, each of the outcomes were conceptualized and defined based on the contemporary literature with attention to utility and application potential for youth recreation programs.

Readers interested in the details of this process should see earlier papers related to the specific outcomes of interest (e.g., ACA, 2011; Eastep, Cachelin, & Sibthorp, 2011; Ellis & Sibthorp, 2006; Sibthorp, Browne, & Bialeschki, 2010). A brief review of each outcome and its importance to youth development is presented below.

### **Friendship Skills (FS)**

Having healthy and meaningful relationships is a vital component to a youth's development and well being. Throughout the youth development literature, the importance of social relationships is considered a core nutrient to healthy development. One of the primary aims of youth is establishing identity and this sense of self is, in part, informed by friendships (Eccles & Barber, 1999). Having good friends is related to a range of positive outcomes, such as academic and social competence, and self-esteem (Cauce, 1986). Youth who lack the skills to initiate, develop, and sustain friendships are at a risk for later maladjustment. Friendships are a source of support, security, and intimacy that help youth develop positive perceptions of themselves (Furman & Buhrmester, 1985; Engels, Finkenauer, Meeus, & Dekovic, 2001). Friendship is marked by closeness, disclosure, companionship, helpfulness, and personal validation (Parker & Asher, 1993). Others have defined friendship simply as a relationship that is close and mutual (Burkowski, Motzoi, & Meyer, 2009). Every area of youth development is influenced by the ability to initiate and maintain healthy relationships with peers and adults (Wentzel, 1999).

Due to the significant role that healthy friendships play in youth's lives, youth-serving organizations can play an important role in providing opportunities for positive peer relationships to form. Camps, specifically, are one context that is especially well suited to fostering friendships. One of the highlights for youth who attend camp is the friendships formed. Camp is often considered a safe and supportive context that encourages respect, honesty, and trust and discourages stereotypes, bullying, and cliques (ACA, 2005). Consequently, camp may be an important context where youth learn how to navigate socially challenging situations and learn the skills necessary to successfully develop and sustain friendships. Results from the National Outcomes study showed that campers developed greater social and friendship skills tied to things like getting along with others, making new friends, and playing with new kids (ACA, 2005). Other evidence shows that friendships at camp are related to greater social functioning at camp and related to campers' positive evaluation of their experience at camp (Hanna & Berndt, 1995). Thus, camp may be a place that can help to facilitate the development of important social skills and specifically those related to building meaningful friendships. The YOB defined friendship skills as the "Perceived skills in initiating, developing, and sustaining enjoyable and socially intimate relationships with other people" (Ellis & Sibthorp, 2006, p. 40). To this end, the friendship scale consists of 14 items that reflect the social skills necessary to establish and maintain friendships.

### **Family Citizenship Behavior (FCB)**

The idea of family citizenship behavior (FCB) stems from the literature on organizational citizenship behavior (Organ, 1988). Organizational Citizenship Behavior (OCB) refers to behaviors that are "discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promote the efficient and effective functioning of the organization" (Organ, 1988, p. 4). In other words, OCBs are those behaviors that go beyond specified performance requirements and promote the achievement of an organization's goals. This is often referred to as extra-role behaviors, which is one of the distinguishing characteristics of OCB and is in contrast to in-role behaviors, or those behaviors that are expected of a given role (Van Dyne, Graham, & Dienesch, 1994). Based on this literature, the conceptual premise of FCB was developed and tested as part of the YOB (Ellis & Sibthorp, 2006). Family citizenship behavior refers to a child's

willingness to engage in behaviors that are both expected and that go beyond role expectations and contribute to the family's overall functioning. For example, an in-role behavior might entail a child doing chores that are expected. On the other hand, an extra-role behavior might involve the child completing another family member's chores without being asked, and simply do so because they want to help.

The development and use of this construct as a primary outcome of the YOBS stems from the belief that camp is a context that emphasizes campers learning how to help others, work collaboratively, and show unselfishness towards others (ACA, 2005). Camp is a place where campers typically take on tasks (e.g., chores) and may learn how their behaviors contribute to camp functioning. For example, campers are often asked to clean up after meals or keep their cabins cleaned. Engaging in these expected roles at camp can also lead to an awareness and desire to help out in ways that are not expected. It is hoped that campers learning about in-role and extra-role behaviors at camp will transfer this learning back to their home environment. Ellis and Sibthorp (2006) defined FCB as "Campers' intentions to perform in-role and extra-role behaviors in the family environment" (p. 40). From this definition, six items were developed to capture whether the camp experience helps campers to become better citizens within their families.

### **Responsibility (RESP)**

A hallmark characteristic of youth as they mature is the increased capacity for personal responsibility. The Search Institute identifies responsibility as a key internal asset for healthy development in young people (Scales & Leffert, 2004). Largely defined as the tendency to accept the consequences of one's own actions, responsibility is seen as one of six widely held "positive values" (Scales & Leffert, 2004; Schwartz & Howard, 1982). Although there are many values that vary between people and cultures, these six values are considered to transcend individual differences. These values are divided into two broad categories: prosocial behaviors, (caring, and equality/social justice) and personal character (integrity, honesty, responsibility, and restraint). The development of these values in youth are critical because they help to direct how youth think and act (Scales & Leffert, 2004).

Evidence shows promising findings that values, such as personal responsibility, can be taught in youth. For example, Scales, Blythe, Berkas, and Kielsmeier (2000) found that youth participating in service learning opportunities or volunteering was linked to increased personal and social responsibility. Other programs such as the Teaching Personal and Social Responsibility (TPSR) model have proven effective in helping youth learn important skills tied to taking ownership of their personal lives and actions (Hellison, 2003). A key concept of this model is that in order for youth to be effective in their social context they have to be responsible to both themselves and others (Cecchini, Montero, Alonso, Izquierdo, & Contreras, 2007). Ellis and Sibthorp (2006) define responsibility as a "habit of owning and accepting consequences of personal actions" (p. 40). The responsibility scale is comprised of six items that ask whether camp has helped campers learn from their mistakes and take ownership over one's actions.

### **Team Work (TW)**

The concept of teamwork is a popular outcome of many youth programs. According to Salas, Dickenson, Converse, and Tannenbaum (1992) a team consists of "two or more individuals interacting adaptively, interdependently and dynamically towards a common and valued goal... In addition, team members are each assigned specific roles/functions to perform" (as cited in Salas, Burke, & Cannon-Bowers, 2000, p. 341). Although there is general consensus on what a team is, there are a number of ideas on the types of skills, knowledge, and processes that define teamwork. Some have defined teamwork as a group's ability to work together towards a shared

goal, foster confidence, effectively communicate, and anticipate needs (Siskel & Flexman, 1962). Others have suggested that teamwork should be assessed in terms of loyalty and prioritizing affiliations over productivity (Guest, 2008). In the youth development literature, a group of researchers sought to understand the development of teamwork from youth's experiences working on a project together (Larson, Hansen, & Walker, 2005). When asked what they learned from this process, youth reported: (a) Learning how to accept others' viewpoints, (b) giving people space to complete a task in their own way, (c) recognizing individual differences and (d) working together. These responses yield a unique perspective on how youth perceive to learn teamwork skills.

Evidence shows that many youth programs support the development of teamwork, and camp is no different (e.g., Larson et al., 2005). Camp provides a distinctive setting in which campers have opportunities to participate in group activities that often consist of being on a team (e.g. team sports, problem solving activities). Many of these activities require youth to work together, value other's viewpoints and differences, communicate, take on leadership roles and be team-players. Studies support these beliefs and show that camp improves skills tied to teamwork (e.g., Bialeschki, Dahowski, & Henderson, 1998; Garst & Bruce, 2003). Based on theory and findings from studies, the development of the Teamwork scale was premised on the belief, "that one can be an effective and productive group member" (Ellis & Sibthorp, 2006 p. 40). The scale consists of eight items that assess a campers' ability to assume different roles (e.g., leader, follower, team-player), put group goals above personal goals, and accept different opinions and perspectives.

### **Independence (IND)**

Independence has long been considered a hallmark characteristic of a youth's growing maturity. The concept of independence often overlaps and is sometimes used interchangeably with related constructs such as autonomy, self-control, individualism, self-determination, self-efficacy, self-regulation and detachment (e.g., Noom, Dekovic, & Meeus, 2001). Independence is broadly defined as the "circumstance of not relying on others for support, help, or supplies" (Chirkov, Ryan, Kim, & Kaplan, 2003, p.98). For many youth, tension exists between the desire for more independence, the security of adult support and guidance, and the longing for peer acceptance. Yet, undoubtedly the importance of developing increasing independence is a critical skill for youth to successfully transition into adulthood. Furthermore, a susceptibility to succumb to peer pressure is particularly high during early to mid-adolescence suggesting that self-reliance and independence may help to mediate such effects (Steinberg & Silverberg, 1986). Thus, the importance of developing a sense of autonomy from parents, adults, resistance to peer pressure and a sense of self-reliance may provide important elements necessary for healthy psychosocial adjustment (Steinberg & Silverberg). Given its importance, providing youth a supportive context to make authentic decisions and to engage in and learn more autonomous behaviors may foster greater independence.

For many campers going to camp can be a key opportunity to learn independence in a safe and supportive environment. Being away from home for the first time, experiencing a new environment, meeting new people, and trying new things all provide an opportunity for youth to gain a sense of self-sufficiency. Although some of these new experiences may be challenging for campers, they are also occurring in a supportive environment that can foster independence (ACA, 2005). The American Camp Association's (2005) National Youth Outcomes report shows that camp increases campers' sense of independence. This is consistent with parent reports indicating that camp positively impacts campers' sense of independence, self-sufficiency, and secu-

rity within themselves (Dresner & Gill, 1994; Michalski, Mishna, Worthington, & Cummings, 2003). Thus, the development of the Independence Scale was premised on the belief that camp experiences can help campers learn to depend less on others to solve problems. The Independence construct was defined as beliefs that personal effectance is not dependent on others, and the scale consists of eight items that reflect a campers' ability to independently engage in activities and make decisions without parent, adult or peer guidance.

### **Perceived Competence (COMP)**

Empirical research and theory indicate that a key component to successful youth development lies in one's sense of competence (e.g., Eccles & Gootman, 2002). The development of competence is linked to the self-beliefs one forms. These beliefs can include both broad evaluations of the self (self-esteem) or specific beliefs (competence) (Wigfield & Eccles, 1994). Children begin to develop these evaluations as early as eight years old (Harter, 1983). Harter's (1988) seminal work construes self-perceptions as competence or adequacy. These beliefs reflect a child's belief about how good they are at an activity. According to Harter, youth can begin to make distinctions and evaluate competence in distinct domains, which influences a general belief of self-worth. Harter developed eight specific domains to assess youth's sense of competence or adequacy that assesses scholastic competence, social acceptance, athletic competence, close friendship, behavioral conduct, job competence, physical appearance, and romantic appeal (Harter, 1988). If a child feels competent in an activity, the child is more likely to value the activity over time. This sense of competence likely leads to greater interest and greater engagement in the activity that can contribute to further achievement (Jacobs & Eccles, 2000). Thus, providing youth opportunities to develop skills in various domains may facilitate youth achieving healthy self-perceptions.

Camp has long been regarded as a setting in which youth can develop important skills that positively influence self-perceptions. Camp has been shown to increase self-perceptions related to communication, decision-making, working with groups, understanding self, leadership, and athletic ability (Anshel, Muller, & Owens, 1986; Toupençe & Townsend, 2000). Camp experiences have also been linked to improvements in a campers' more general evaluation of self, as measured by self-esteem (ACA, 2005; Dresner & Gill, 1994; Readdick & Schaller, 2005). Some evidence suggests that increases in self-esteem at camp may in part be due to learning new skills, a sense of competence, bonding with other campers, and goal setting/achievement, (Kaplan, 1977; Readdick & Schaller). Thus, evidence indicates that camp can improve campers' self-percepts both in general and across multiple and specific domains. Consistent with these findings, Ellis and Sibthorp (2006) define perceived competence as "campers' beliefs about their ability to be successful that are integrated with their 'self'" (p. 39). The Perceived Competence scale measures campers' perceived competence, based on Harter's conceptualization of self-perceptions. The scale consists of eight items that assess campers' beliefs about their ability to be successful cognitively, physically, socially, and in general.

### **Affinity for Exploration (AE)**

Affinity for Exploration is the "desire to explore and engage in new experiences" (Ellis & Sibthorp, 2006, p. 40). Exploration is largely regarded as an effort to understand a situation or object (Weisler & McCall, 1976). Exploration is an important factor that drives cognitive and social development in children (Rusher, Cross, & Ware, 1995; Weisler & McCall, 1976). The desire to engage in exploratory behaviors is tied to a sense of curiosity. Considered the motivational component of exploration, curiosity is largely directed towards actively seeking out (a) novelty

and challenge (diversive curiosity) or (b) pursuing depth of knowledge of a specific source of stimulus or activity (specific curiosity) (Berlyne, 1960). Piaget (1962) suggests that this desire to explore is an innate need that children pursue as a way to make sense of the world. Curiosity is linked to a number of important outcomes, such as educational attainment (Day, 1982), positive evaluations of the self and world, openness to new experiences and healthy interpersonal relationships (Kashdan, Rose, & Fincham, 2004; Kashdan & Roberts, 2004). Some have argued that presenting children with optimal amounts of novelty, complexity, and ambiguity are key attributes of stimuli that facilitate children's curiosity (Berlyne, 1960; Bishop & Jeanrenaud, 1995).

Due to the relative novelty of experiences and activities at camp, it may be that camp is especially well suited to foster curiosity and exploration in campers (Dresner & Gill, 1994). For many campers, camp is a place unlike other familiar settings (e.g. home, school) that provides experiences for children to learn new things, experiment, meet new people, play in creative and innovative ways, and to investigate new surroundings. Providing campers with experiences that hook them with a sense of interest may serve to "prime" curiosity (Loewenstein, 1994). For instance, camp offers a range of activities that are typically novel for children, such as archery, outdoor skills, and horseback riding. Camp also provides a social environment where campers learn to work with other campers and camp staff that reflect unique social norms (e.g., sharing cabins, meals, activity times) that may be new and exciting to many youth. Because of the relative novelty of these experiences, campers may be curious and seek to resolve any sense of dissonance when assimilating these new experiences and information into pre-existing knowledge structures (Bishop & Jeanrenaud, 1995; Piaget, 1962). This process may facilitate a camper's desire to continue to explore and gain further insight and skill experience related to the camp experience (try new and different activities, make more friends, take on different roles, etc.). To this end, the Affinity for Exploration scale consists of eight items that measure a camper's desire to explore and engage in new experiences (Ellis & Sibthorp, 2006). The scale assesses whether camp facilitates camper curiosity, inquisitiveness, and eagerness to explore new experiences that pertain to people, places, activities and ideas.

### **Affinity for Nature (AN)**

The importance of experiences in, and affinity for, nature has been widely recognized (e.g., Louv, 2008). People who are affectively or emotionally connected to nature are more likely to act responsibly toward it (Kals, Schumacher, & Montada, 1999; Schultz, Shriver, Tabanico, & Khazian, 2004). Gould (1993) writes, "we cannot win the battle to save species and environment without forging an emotional bond between ourselves and nature... we must have visceral contact in order to love" (p.40). Scholars and educators including Orr (2004), Sobel (1996), and Pyle (1998) have repeatedly emphasized the need for outdoor experiences to activate an emotion-based bond that will increase pro-environmental behavior. Furthermore, an examination of nearly a dozen studies concerning significant life experiences to which conservationists attributed their attitudes and behaviors suggests that outdoor experiences during youth are critical (Chawla, 1998). Ninety-one percent of conservation professionals surveyed cited experiences in the outdoors as the source of their environmental attitudes and 77% cited these experiences as the source of their environmental commitment. If, as these numbers suggest, it is more sensorial, visceral, engaging, and less cognitively-oriented nature based experiences that foster pro-environmental behaviors, then youth focused outdoor recreation programs, such as camps, have a major role to play.

Emotional affinity toward nature is a construct based on the emotional attraction literature. Developed by German scholars Kals, Schumacher, and Montada (1999), the emotional affinity



toward nature construct directly stems from the work of two other German scholars, Gebhard (1994) and MaaBen (1993). Gebhard's writings state that feeling good, free, safe in nature, and feelings of oneness with nature are closely related to a love of nature, which resonates as a romantic attitude expressed in literature. MaaBen's work helped Kals and colleagues (1999) define emotional affinity for nature in terms of a person having a positive appraisal or evaluation toward nature in four conceptually different domains: love of nature, feelings of freedom, feelings of safety, and feelings of oneness. For the YOB, emotional affinity for nature is defined as feelings of emotional attraction toward nature. It is measured by a 10 item scale that taps feeling of attraction to, comfort in, freedom in, and connectedness to nature.

### **Problem-Solving Confidence (PSC)**

Problem-solving skills allow a young person to identify and effectively contend with day-to-day problem situations. Failure to employ effective problem-solving skills can have lasting effects on the young person, such as psychological maladjustment, suboptimal physical health, and diminished capacity for coping with stress and adversity (Heppner, Witty, & Dixon, 2004; Malouff, Thornsteinsson, & Schutte, 2007). Effective problem-solving skills, on the other hand, are considered a protective factor that may buffer the effect of negative influences in the young person's life (Lee, 2006). Problem solving skills enable young people to face a broad spectrum of problems, including those issues that are relatively simple (e.g., deciding what to wear to school) as well as problems that are highly complex (e.g., deciding where to go to college; Heppner, 2008). While valuable, problem solving skills are also highly contextual and domain specific. Someone who is highly skilled at solving a technical engineering problem is not necessarily well prepared to deal with an awkward social situation or an incident of bullying at school.

In contrast to problem-solving skills, personal appraisals or perceptions of problem-solving skills are more likely to extend across domains, resulting in an individual's general sense of problem solving confidence. As a belief about one's ability to enact the specific problem solving skills, problem solving confidence emerges through repeated application of the processes that comprise problem-solving skills.

Bandura (1982) suggests that the mechanism of self-efficacy serves as the affective link between problem-solving skills and problem-solving confidence. Simply put, when a person feels efficacious solving a problem in one domain, they are more likely to attempt a problem in a different domain, and this attempt is directed by one's "general beliefs and evaluations about themselves as a problem solver" (Heppner, 2008, p. 807). The relation between personal appraisals of problem-solving abilities and actual problem solving skills is supported in the literature (Heppner et al., 2004), thus a self-reported measure of these appraisals may effectively predict one's problem-solving skills. Sibthorp et al. (2010) defined problem solving confidence as campers' personal appraisals of their abilities to resolve problems. The problem-solving confidence scale is comprised of eight items which measure one's confidence in defining, planning for, deciding solution steps for, and evaluating solutions for problems.

### **Camp Connectedness (CC)**

Connectedness, or one's beliefs that they are cared for as an individual (Blum & Libbey, 2004), is examined most extensively in the school setting. The documented immediate effects of school connectedness include academic achievement and competence (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; Klem & Connell, 2004), reduction in behavior problems in school (Loukas, Ripper-Suhler, & Horton, 2009; McNeely & Falci, 2004), and improved social adjustment (Battistich, Schaps, & Wilson, 2004; Battistich, Solomon, & Watson, 1998). Long-



term, generalized benefits include reductions in trait anger (Rice, Kang, Weaver, & Howell, 2008) and overall mental well-being (You, Furlong, Felix, Sharkey, & Tanigawa, 2008; Shochet, Dadds, Ham, & Montague, 2006). The relation between student connectedness and these desirable outcomes is such that connectedness is an important protective factor for youth (Reznick, Harris, & Blum, 1993).

In addition to serving as a buffer against negative influences, connectedness is considered essential to the optimal development of young people (Eccles & Gootman, 2002; Pittman, Irby, Tolman, Yohalem, & Ferber, 2003; Lerner et al., 2005). Connectedness represents a central component within several models of positive youth development (e.g., the Five Cs, Lerner et al., 2005; Pittman et al., 2003), each of which recommend prioritizing caring youth-adult relationships, as well as peer relationships, in order to foster connectedness in youth settings. Thus, the ideal of connectedness remains central to most youth settings, including recreation and out-of-school time activities.

Summer camp is a setting often characterized by unique relationship-building opportunities and is ideally situated to promote a connectedness among young people. The outcomes of a typical camp experience generally include intra- and interpersonal skills such as strengthened values and social competence (Thurber, Scanlin, Scheuler, & Henderson, 2007; Bialeschki et al., 2007; Henderson et al., 2007), both of which are important facets of social interactions. Although there is widespread agreement on the personal benefits of the camp experience, scholars contend that the specific etiology of the camp experience is largely unknown (Bialeschki et al., 2007). It can be hypothesized, however, that through structural features such as small and sustained camper-staff groupings (Roth & Brooks-Gunn, 2003), activities that engage youth's intrinsic interests (Caldwell, 2005), and relative isolation from potentially detrimental social influences (Thurber et al., 2007), camps might serve to promote connectedness in unique ways. Sibthorp et al. (2010) defined camp connectedness as the camper's personal relationship to camp (adapted from Libbey, 2004). The camp connectedness scale is comprised of 12 items which measure connection to the social environment including acceptance by staff and peers, sense of belonging, and emotional safety.

### **Spiritual Well-Being (SWB)**

Spiritual beliefs, experiences, and feelings are central to the human experience and, as such, play an important role in human development. With respect to youth specifically, spirituality is thought to protect young people from such negative influences as depressive symptoms (Cotton, Larkin, Hoopes, Cromer, & Rosenthal, 2005) and substance use (Ritt-Olson, Milam, Unger, Trinidad, Teran, Dent, & Sussman, 2004; Houscamp, Fisher, & Stuber, 2004) and to promote an array of desirable outcomes such as moral development, identity formation, well-being, and thriving (Benson & Roehlkepartain, 2008). Considering this spectrum of benefits, many scholars identify spirituality as a key component to positive youth development (Pittman et al., 2008; Benson & Roehlkepartain, 2008). Spiritual well-being, which Ellison (1983) describes as an "expression of spiritual health" (p. 332), is a tenet of spirituality that has particular relevance to the developmental processes that occur specifically in the summer camp setting.

Despite its salience to positive youth development, the notion of spirituality continues to elude consistent conceptualization. For example, some scholars define spirituality in terms of its distinction from religiosity (e.g., Holder, Coleman, & Wallace, 2010; Cotton et al., 2005; Ritt-Olson et al., 2004) while others contend that the spirituality and religiosity, while conceptually different, are inseparable domains (Good & Willoughby, 2006; Benson & Roehlkepartain, 2008). Spirituality and religiosity often encompass beliefs, attitudes, feelings, and behaviors that reflect

specific religious practices or belief systems. In contrast, spiritual well-being offers a more global approach to spirituality and, for this reason, is especially applicable in youth development settings. One's connections with other people and nature, transcendence, and overall feelings of meaning and purpose in life are generally applicable across religious contexts and are central tenets of spiritual well-being (Ellison, 1983; Howden, 1993; Gomez & Fisher, 2003). Camp is a context known to foster interpersonal connectedness (Yuen et al., 2005; Bialeschki et al., 2007) as well as connections to the natural world (Browne & Bialeschki, 2010). While previous research documents the relation between camp and spiritual development among campers (e.g., ACA, 2005; Henderson, Oakleaf, & Bialeschki, 2009), little is known about the ways camp may contribute to spiritual well-being, and specifically the ways camp fosters transcendence and feelings of life purpose and meaning. As other subscales of the YOB already purport to measure interpersonal connections and connections to the natural world, the spiritual well-being subscale was created to use in combination with these subscale. This subscale was delimited to a campers' personal beliefs in transcendence and of purpose and meaning in life (Sibthorp & Browne, 2011) and was measured by six items.

## Method

Given the broad base of literature supporting the 11 YOB constructs and the serial developmental approach that spanned six years, the purpose of this study was to provide an overarching examination of the YOB psychometrics and to proffer subscale norms. Accordingly, a total of 88 camps were invited to participate in the study during the summers of 2010-2011. Forty-four day camps and 44 resident camps were randomly selected from all ACA accredited not-for-profit camps. Given previous differences between resident and day camps, the normative sample is stratified by day and residential camp. Each camp was asked to provide a minimum of 100 completed questionnaire batteries.

Given that 11 camper outcomes were contained in the YOB, the camps were randomly assigned and sent one of two possible batteries of outcome instruments. Battery A included the six shorter outcomes: FCB, COMP, RESP, IND, TW, PSC. Battery B included the remaining four outcomes available in 2010: AE, AN, CC, FS. The 11<sup>th</sup> outcome, SWB was added to battery B in the second year of data collection because it was being piloted in 2010. While the YOB has two published response formats, only the basic response format was used in this study. The basic response format was designed to directly elicit campers' beliefs about the effect that camp had on their development with respect to terms of each outcome (e.g., Guion & Rivera, 2006; Witt & Crompton, 1995). Campers indicated, along a 5-point scale, the extent to which particular skills decreased (low) or increased (high; e.g., *working well with others*). Camp connectedness, which does not exist prior to a camp experience, was measured on a 6-point status scale ranging from *false* (1) to *true* (6).

Descriptive statistics were run for the norming analysis, segmented by camp type. Original data cleaning, screening, and assumption testing were conducted in SPSS prior to further analysis. Convergent and discriminant validity were assessed using established criteria (Fornell & Larcker, 1981) through the use of confirmatory factor analysis (CFA) using AMOS 18 and maximum likelihood estimation. Each of the subscales were treated as correlated latent constructs and Lagrange multiplier tests were only inspected to identify correlated errors within subscales; no other model modifications were considered theoretically justifiable. As the battery A outcomes were collected from different youth than the battery B outcomes, two separate CFAs were conducted.

### Results for Battery A Outcomes

A total of 1,993 youth from 22 different camps completed the six subscales of the YOB included in Battery A. Thirteen of these camps were resident camps. Six camps were day camps. Three camps included both day and resident participants. Twenty-two invited camps did not provide data. The youth in the sample were 69% female and averaged 11.9 years of age. They reported attending this camp, on average, 1.5 weeks/year. The average camper had attended this camp 2.5 years. Forty-nine percent of the sample self-reported an ethnicity other than Caucasian.

Most of the means were between 3 and 3.5 on the scale of 1-5. Day camps had slightly lower means than resident camps. The distributions were approximately normal, and thus met the assumption of normality necessary for parametric inferential statistical analyses (see Table 1).

**Table 1**

*Descriptive Statistics for Battery A Outcomes*

|   |                | <b>FCB</b> | <b>COMP</b> | <b>RESP</b> | <b>IND</b> | <b>TW</b> | <b>PS</b> |
|---|----------------|------------|-------------|-------------|------------|-----------|-----------|
| N | Valid          | 1917       | 1897        | 1904        | 1917       | 1851      | 1886      |
|   | Missing        | 76         | 96          | 89          | 76         | 142       | 107       |
|   | Mean           | 3.3        | 3.5         | 3.5         | 3.6        | 3.5       | 3.3       |
|   | Median         | 3.3        | 3.6         | 3.5         | 3.7        | 3.6       | 3.3       |
|   | Std. Deviation | .91        | .87         | .98         | .98        | .95       | .97       |

### CFA Results for Battery A Outcomes

The initial model tested included the six battery A outcomes as correlated latent constructs each indicated with between 6 and 8 items. Without additional modification the model fit adequately and all the standardized loadings were above .65. However, as similarly worded items within subscales were expected to have correlated errors, Lagrange multipliers were inspected and 13 of the error terms were allowed to correlate. This was consistent with the theoretical framework, subscale, and wording of the items. The final model exhibited acceptable to good fit with the empirical data ( $\chi^2/df = 2.74$ , RMR = .03, GFI = .94, CFI = .98, RMSEA = .032). The correlations between the latent constructs ranged from a low of .71 (FCB and IND) to a high of .89 (COMP and RESP). See Figure 1 for standardized loading and latent construct correlations.

The battery A outcomes exhibited excellent reliability (see Table 2). Composite reliabilities ranged from a low of .89 to a high of .94. Cronbach's alphas, measuring internal consistency reliability, ranged from a low of .90 to a high of .94. Convergent and discriminant validity were assessed using the criteria proposed by Fornell and Larcker (1981). Convergent validity is evidenced by high (>.70) standardized loadings, reliabilities greater than .80, and AVE (Average Variance Extracted) > .50. While there was substantial evidence for both convergent validity and reliability, the Battery A outcomes may not be distinct. Only FCB seemed to be distinctly different from the other battery outcomes. All others had substantial problems with the criteria established by Fornell and Larcker, as their AVEs did not exceed the squared correlations with other subscales.

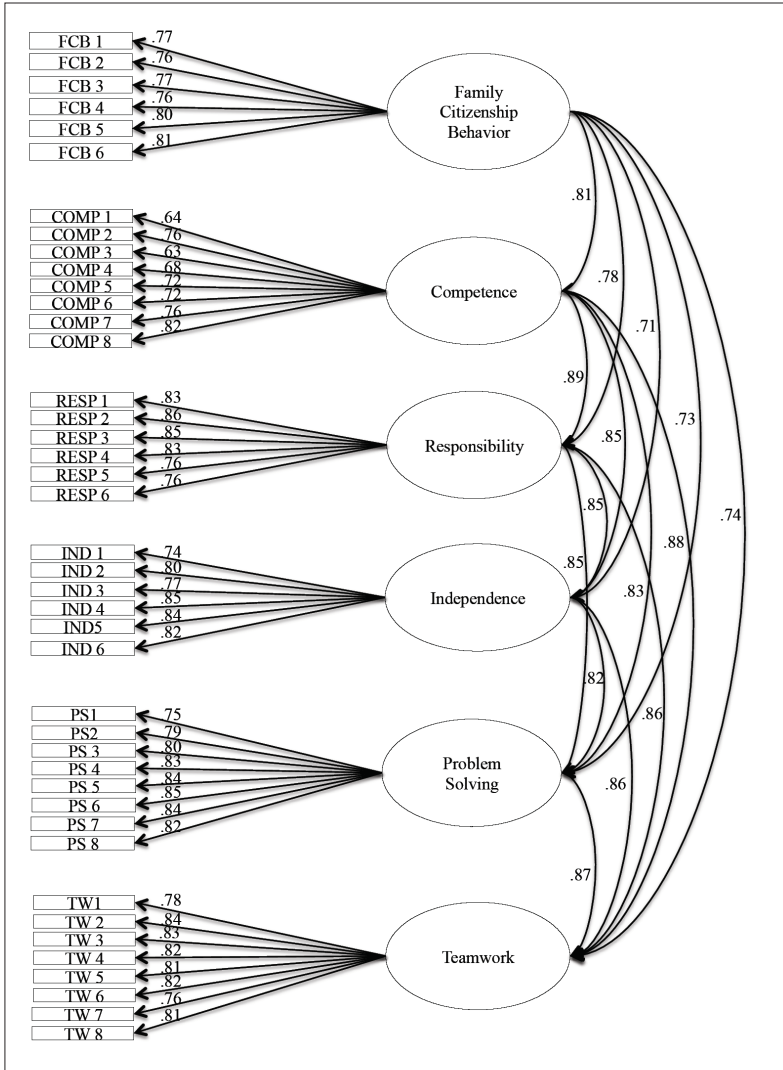


Figure 1. Measurement Model for Battery A Outcomes. Note: standardized loadings are all significant at  $p < .001$ .

### Results for Battery B Outcomes

A total of 1757 youth from 17 different camps completed the subscales of the YOB included in Battery B for both years. Ten of these camps were resident camps. Two camps were day camps. Five camps included both day and resident participants. Twenty seven invited camps did not provide data. The youth in the sample were 66% female and averaged 12.1 years of age. They reported attending this camp, on average, 1.6 weeks/year. The average camper had attended this camp 2.8 years. Forty percent of the sample self-reported an ethnicity other than Caucasian.

**Table 2***Subscale Reliability Estimates, Battery A Outcomes*

| <b>Subscale</b> | <b>Composite Reliability</b> | <b>Average Variance Extracted</b> | <b>Cronbach's Alpha</b> | <b>Number of Items</b> |
|-----------------|------------------------------|-----------------------------------|-------------------------|------------------------|
| FCB             | .90                          | .61                               | .91                     | 6                      |
| COMP            | .89                          | .52                               | .90                     | 8                      |
| RESP            | .92                          | .67                               | .92                     | 6                      |
| IND             | .92                          | .65                               | .92                     | 6                      |
| TW              | .94                          | .66                               | .94                     | 8                      |
| PSC             | .94                          | .67                               | .94                     | 8                      |

The means on AE, AN, FS, and SWB are all over 3.7 on the scale of 1-5. The distributions for AE, AN, FS, and SWB were approximately normal, and thus met the assumption of normality necessary for parametric inferential statistical analyses. Camp Connectedness scores were also high, with a mean of approximately 5.2 out of 6; this distribution was negatively skewed because of these high scores and the associated ceiling effect (see Table 3).

**Table 3***Descriptive Statistics for Battery B Outcomes*

|                | <b>AE</b> | <b>CC</b> | <b>FS</b> | <b>AN</b> | <b>SWB</b> |
|----------------|-----------|-----------|-----------|-----------|------------|
| N Valid        | 1673      | 1628      | 1620      | 1629      | 649        |
| Missing        | 84        | 129       | 137       | 128       | 1108       |
| Mean           | 3.9       | 5.2       | 3.8       | 3.8       | 3.7        |
| Median         | 4.1       | 5.5       | 4.0       | 4.1       | 4.0        |
| Std. Deviation | .85       | .85       | .93       | 1.06      | 1.13       |

**CFA Results for Battery B Outcomes**

The initial model tested included the four battery B outcomes from both years of data collection as correlated latent constructs each indicated with between 6 and 14 items. The initial model fit was adequate. This model was then compared to a second model including only the data from 2011 so that SWB could be included in the model. As the addition of SWB did not notably alter the interpretation for any of the initial four outcomes (AE, AN, CC, and FS) and allowed testing of SWB, this second model was retained. As similarly worded items within subscales were expected to have correlated errors, Lagrange multipliers were inspected and 21 of the error terms were allowed to correlate. This was consistent with the theoretical framework, subscale, and wording of the items. The final model exhibited acceptable to good fit with the empirical data ( $\chi^2/df = 2.28$ , RMR = .09, GFI = .83, CFI = .94, RMSEA = .049). The correlations between the subscales ranged from a low of .13 (CC and SWB) to a high of .83 (FS and AE) and indicated that this group of outcomes (battery B) was likely more distinct than those in battery A. See Figure 2 for standardized loading and latent construct correlations.

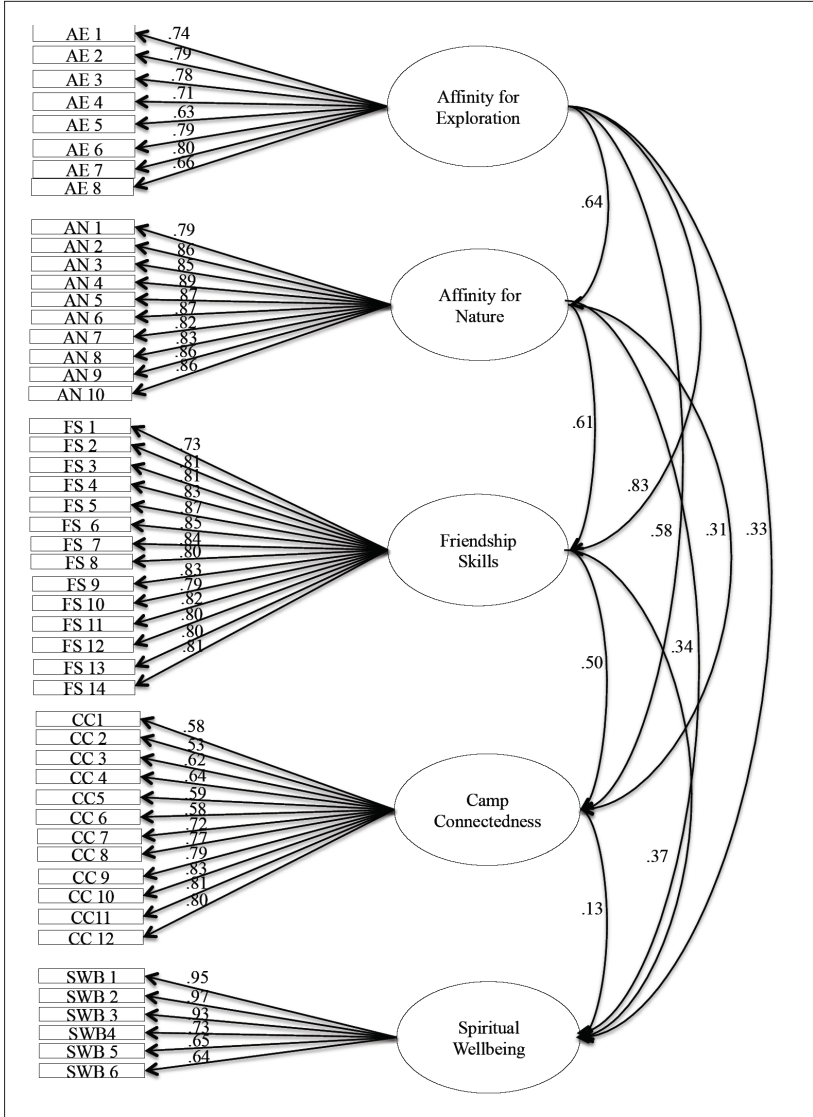


Figure 2. Measurement Model for Battery B Outcomes. Note: standardized loadings are all significant at  $p < .001$ .

The battery B outcomes exhibited excellent reliability (see Table 4). Composite reliabilities ranged from a low of .90 to a high of .96. Cronbach’s alphas, measuring internal consistency reliability, ranged from a low of .90 to a high of .96. Convergent and discriminant validity were assessed using the criteria proposed by Fornell and Larcker (1981). Convergent validity was evidenced by high (>.70) standardized loadings, reliabilities greater than .80, and AVE > .50. There is evidence for both convergent validity and reliability for most of the subscales. Camp Connectedness had the lowest loadings and also an AVE of .48; thus CC technically failed to meet the a-priori criteria for convergent validity. There was good evidence of discriminant validity

**Table 4***Subscale Reliability Estimates, Battery B Outcomes*

| <b>Subscale</b> | <b>Composite Reliability</b> | <b>Average Variance Extracted</b> | <b>Cronbach's Alpha</b> | <b>Number of Items</b> |
|-----------------|------------------------------|-----------------------------------|-------------------------|------------------------|
| AE              | .90                          | .55                               | .90                     | 8                      |
| AN              | .96                          | .72                               | .96                     | 12                     |
| CC              | .92                          | .48                               | .91                     | 14                     |
| FS              | .96                          | .66                               | .96                     | 10                     |
| SWB             | .92                          | .68                               | .96                     | 6                      |

for the Battery B Outcomes. The only two latent constructs with a squared correlation greater than their individual AVEs was the  $r^2$  of .69 between FS and AE.

### Discussion

The primary purpose of this study was to further assess the evidence of validity and reliability of the YOB from a representative sample of ACA accredited not-for-profit camps. A secondary purpose was to collect normative data on the YOB. The results of this study largely supported the reliability and convergent validity of the subscales. The discriminant validity of the subscales was partially supported.

The subscale means largely supported the extant literature on the developmental potential of the camp experience (e.g., Bialeschki, et al., 2007; Henderson, et al., 2007). Means of over 3 for all subscales represented perceptions of growth while at camp. In addition, higher means for the resident camps, which have greater dosage/week than day camps, is conceptually consistent with a priori expectations. However, given the relatively small number of day camps in the final sample, these differences should be interpreted with caution. It is also notable that the majority of the subscale means and distributions do not suffer from ceiling or floor effect (i.e., the subscales have relatively normal distributions). Thus, data from the subscales appears suitable for normal parametric data analyses.

The reliability and convergent validity findings were consistent with previous reports on the YOB subscales (e.g., Eastep et al., 2011; Ellis & Sibthorp, 2006; Sibthorp et al., 2010). There was evidence that the scales are internally consistent and that the items converged upon a common construct. While camp connectedness failed to meet the a priori criteria for convergence, the subscale did exhibit excellent composite and internal consistency reliability. However, the content areas of camp connectedness are fairly broad (Sibthorp et al., 2010), and the items did not empirically work as well together as items for the other subscales.

Five of the battery A outcomes (COMP, RESP, IND, TW, and PSC) did not exhibit good discriminant validity. While camps/programs may wish to conceptually differentiate these five outcomes, it is not clear from this study that youth see these outcomes as distinct. Perceived competence, as conceptualized by Harter (1983) and defined in the YOB, is global and likely cuts across several other domains targeting self perceived effectiveness. Conceptually, responsibility, independence, and problem solving confidence are certainly interrelated. However, the findings from this study also raise the potential that youth are unable to discern the subtle differences as these constructs were defined and operationalized. This could indicate a problem with the way the items were constructed. It is also possible that the camp experience is rather holistic in focus and leaves youth with either a global increase or decrease in self-perceived effectiveness



or positive affect for camp, which universally influences self-perceptions. These five subscales may also tap different domains of some of the larger concepts currently discussed within youth development fields such as 21st century learning skills (Partnership for 21<sup>st</sup> Century Skills, n.d.), non-cognitive skills (Tough, 2012), life skills (Galinsky, 2010), or achievement gap mediators (Wagner, 2010).

### **Implications for Practice and Research**

There are a number of implications for practice learned by going through this process of creating the Youth Outcomes Battery, particularly when viewed within the context of recreation professionals looking for outcomes tools for youth. Youth work professionals have begun to recognize the value of evidence that documents the impact of their programs on their participants. Most practitioners work in mission-driven organizations that need to demonstrate consistency between mission/goals, the way a program is implemented, and how outcomes are linked to the program implementation. However, many of these professionals have objected in the past to data collection processes used with their participants, because they felt the process was obtrusive, they didn't have confidence in instrumentation, or they didn't have the skills and expertise needed to actually analyze and interpret the data.

During development we polled youth work professionals, who consistently had a "wish list" for new outcomes measures. They wanted surveys that were short, customizable, easy to administer and analyze, were age and setting appropriate, and ultimately, produced data they could trust. They also wanted surveys that supported the intentionality of their programs around specific outcomes, so they wanted measures that were very focused on typical youth development outcomes. Ultimately, they wanted information that would help them to better "tell their stories", develop relevant staff training that tied desired outcomes to expectations and practices directly related to every staff member's job, and guide them as they worked to improve the quality of their programs. The practice implications include the following points.

The YOB is a customizable and easy to use outcome assessment tool specifically designed for youth programs in applied settings. It can be tailored to the program's intended purpose and can help with accountability, program improvement, marketing, and funding. Outcome measures offer a way to document the results of an intentional focus on specific aspects of a youth program and their specific targeted outcomes. These measures may also contribute to understanding the design and implementation factors of camps, youth recreation programs, and other out-of-school time experiences that most effectively foster positive youth development within a systematic quality improvement focus advocated by ACA and other external parties over the last decade (ACA, 2007).

Camps and other programs for youth can select the applicable and targeted outcomes for their programs and compile a single questionnaire with a single set of instructions and consistent layout and appearance. This customization allows a unique approach to the assessment of youth outcomes in a program setting. The outcomes measures offer a particularly useful resource to non-profit camps that may be associated with year round youth programs (e.g., Scouts, 4-H, afterschool programs). These types of non-profit youth organizations can use measures from the YOB across all of their youth programs, thus extending the benefits of outcomes assessment beyond the camp setting.

The YOB is now one of the few assessment options with normative data and a track record of sustained use, adaptation, and translation. Recently the YOB was acknowledged as a promising tool for youth program assessment by the Forum for Youth Investment in *From Soft Skills to Hard Data: Measuring Youth Program Outcomes* (Wilson-Ahlstrom, Yohalem, Dubois, & Ji,

2011). The YOB is also now included in a number of tool data-banks such as Toolfind (<http://www.toolfind.org/>) from the United Way. Furthermore, ACA has worked to make the tools highly useable and accessible. ACA offers online and print training materials to help establish a strong context for outcomes work, supports web-based (and downloadable) analysis templates to ease data-related issues, suggests options for bundling specific YOB measures in ways that address larger issues (e.g., 21<sup>st</sup> Century skills, leadership, life skills), and provides resources that help link outcome efforts to program improvement processes.

Regarding research, the YOB allows youth program practitioners and scholars/academics to further examine the mechanisms that make recreation programs developmental to youth. Targeted programming can be studied and its effectiveness measured. Predictors of outcomes and various experimental designs can investigate the relations and effects of important structural, design, and implementation variables. These might include examining variables thought to impact what youth get out of programs such as adult/youth ratios, program length or dosage, activity base, staff training or experience, institutional approaches or philosophies, or organizational policies.

### **Limitations**

Despite its merits, the YOB also has its limitations and this study remains only a step forward in validity assessment. Validity assessment of a scale is something that unfolds over time, use, and multiple studies. This study illustrates some strengths and weaknesses of the YOB for a sample of not-for-profit, primarily resident, camps.

The YOB, by design, uses easily attained, self-reported data. While all data were anonymous, thus leaving little reason for respondents to intentionally deceive, it is still likely that a number of the participant's self-perceptions were inaccurate. The YOB was also designed to be useful and practical. A focus on developing a practical and useful field-based tool has sacrificed some of the ideals of scientific measurement.

The sample and sampling frame used in this study limit generalizability of the findings. Less than 50% of the camps invited to participate provided data, and those that did were predominantly resident camps rather than day camps. In addition, the YOBs focus on children 10 and older leaves a large segment of youth out of a comprehensive evaluation strategy. The sample of spiritual well-being data was further constrained as it was only collected in the second year of the study.

### **Conclusion**

The YOB offers an established measurement option to youth programs looking for a customizable and easy to use outcome tool. While the norms were established on not-for-profit camp experiences, the YOB continues to find an audience with youth development organizations around the globe. It offers a critical component to a quality program improvement process that supplies youth outcome data to augment staff training, intentionality, and effectiveness of the overall program. The YOB aligns well with contemporary efforts around (a) practices based on evidence and (b) programming for quality being widely embraced by a number of youth-serving agencies (e.g., The Forum for Youth Investment, United Way). Perhaps the most important contribution of the YOB is that practitioners now have a resource that helps them highlight their intentional efforts to reach specific outcomes with their youth, document these efforts with trusted data, and use the information in ways that help them to better share the power of youth recreation programs with their staff, parents, boards, and funders.

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