

THESIS

PARTICIPATION IN SOS OUTREACH; A POSITIVE YOUTH DEVELOPMENT  
PROGRAM

Submitted by

Meghan Ann Keigley

Department of Human Development and Family Studies

In partial fulfillment of the requirements

For the Degree of Master of Science

Colorado State University

Fort Collins, Colorado

Spring 2015

Master's Committee:

Advisor: J. Douglas Coatsworth

Nathaniel Riggs

Aaron Eakman

Copyright by Meghan Ann Keigley 2015

All Rights Reserved

## ABSTRACT

### PARTICIPATION IN SOS OUTREACH; A POSITIVE YOUTH DEVELOPMENT PROGRAM

Adolescence can be a time burdened by physical, emotional and social developmental challenges. However, many extracurricular programs now focus on fostering Positive Youth Development (PYD) with a primary goal of helping youth develop positive life skills and positive trajectories. Many of these programs emphasize providing youth with opportunities to develop positive self-identities and life skills that they can apply to other areas of their lives. Studies have demonstrated positive outcomes of these programs, but have also shown that youth participation is key for gaining these benefits. Many youth drop out of these programs before they are able to fully realize the benefits. The purpose of this study was to examine whether various personal, logistic, and experiential factors predict to continued participation in a Colorado-based PYD program. Eighty-eight adolescent, ages 9 - 17 completed surveys following participation in a winter-long program that incorporates positive youth development into snowsport activities. Youth reported on barriers to participation, developmental experiences, self-defining activities, and parental encouragement to participate in the program. Results indicated that demands of the program and parental encouragement for identity exploration were significantly related to participant retention. Additionally, negative developmental experiences, but not positive developmental experiences within the program were significant predictors of participant retention while program specific self-defining activities were not. Finally, self-defining activities did not moderate the relationship between logistical issues and participant retention.

## ACKNOWLEDGEMENTS

I would like to express my gratitude to my advisor Dr. Douglas Coatsworth, for his guidance, expertise and time that he invested in helping mentor me as I completed my thesis. His patience, mindfulness and positive outlook are qualities I hope to carry with me beyond graduate school and out into the “real world”. I would also like to thank my department committee member Dr. Nathaniel Riggs for his guidance and advice. Without Dr. Riggs’ help I might still be navigating the IRB. Finally, I would like to thank my outside department committee member Aaron Eakman, for his time and insight throughout my thesis process.

I would also like to thank the staff of SOS Outreach for the time and assistance they gave to help me collect my data. I am thankful for the time Arn Menconi, Seth Ehrlich and the SOS Outreach staff spent in meeting with me to help me understand their organization. Most importantly, I am grateful that they provided me the opportunity to study an excellent Positive Youth Development program.

Finally I would like to thank my family and friends for their support and encouragement. Most importantly I would like to thank my parents, who have always supported me in any endeavor I have set out on. For that love and support I will always be grateful.

## TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENTS .....	iii
INTRODUCTION.....	1
LITERATURE REVIEW.....	3
CURRENT STUDY.....	15
METHOD.....	17
RESULTS.....	22
DISCUSSION.....	31
LIMITATIONS AND FUTURE DIRECTIONS.....	36
REFERENCES.....	38

## INTRODUCTION

New strategies for working with at-risk youth have appeared in recent years. Popular among these strategies is the use of Positive Youth Development (PYD) programs (Bowers et al., 2010). PYD programs focus on developing and enhancing positive characteristics of youth through providing environments where they can learn life skills, develop positive personal characteristics, and avoid problem behaviors (Lewin-Bizan, Bowers, & Lerner, 2010; Ramey & Rose-Krasnor, 2012). For PYD programs to be effective, youth must participate in and be engaged with the activities (Eccles, Barber, Stone, & Hunt, 2003; Fredricks & Simpkins, 2012; Pearce & Larson, 2006; Weiss, Little, & Bouffard, 2005). PYD programs, however, may experience high rates of attrition among participants (Hellison & Wright, 2003), decreasing the effectiveness of these programs among target populations. Youth may stop participating in programs for reasons such as they no longer find the activities fun (Armour, Sandford, & Duncombe, 2013), there are too many life barriers that make it difficult to attend (Fredricks, Hackett, & Bregman, 2010), parents do not encourage or actively discourage participation (Sharp, Caldwell, Graham, & Ridenour, 2006), and adolescents do not find the activity to be consistent with their emerging identities (Coatsworth, Palen, Sharp, & Ferrer-Wreder, 2006). Youth experiences within the programs, such as whether they find it to be an important part of their identity, get along with other youth, are treated well by the adult leaders or simply feel that they are benefiting from participating could also contribute to whether youth decide to drop out or remain (Coatsworth et al., 2006). It is possible that how meaningful or important the activity is for youths could moderate whether they continue to participate. While increasing attention has been given to the positive implications of participating in PYD programs, more research is

needed to investigate these and other barriers youth experience that may influence their ability or desire to participate.

The primary goal of this study was to begin to address the gap in understanding of the kinds of barriers that predict drop out from PYD programs. Specifically, this study was guided by three primary aims. The first was to examine types of logistical barriers youth may encounter regarding participating in a PYD program and how those barriers may influence retention. The second goal was to investigate relationships between self-defining activities, and positive and negative developmental experiences in relation to retention. The final aim of this study was to determine if self-defining activities moderated the relationship between logistical barriers, developmental experiences and participant retention.

## LITERATURE REVIEW

Positive youth development grew out of a response to movements looking to enhance the resources provided for at-risk youth (Bowers et al., 2010; Ramey & Rose-Krasnor, 2012). Instead of focusing on the problem behaviors among this population, PYD is based upon an approach that fosters the strengths within the individual (Lewin-Bizan et al., 2010). This concept of focusing on the strengths within individuals dates back at least 2300 years to the Greek Philosopher, Aristotle. For centuries individuals have focused on ways to improve everyday life. Aristotle was among the first to create “guidelines” for how to maximize the ways in which we live. He suggested that well-being goes beyond good health to include meaningful relationships, finding one’s purpose in life, achieving self-realization and being in an environment which fosters positive growth, self-sufficiency and acceptance of oneself (Ryff, 2013). The PYD approach is designed to help youth achieve these positive life goals.

Studies of PYD include both basic developmental studies of the characteristics and environments that promote positive development during the teen years and the kinds of deliberate and natural interventions that help youth develop these healthy skills and characteristics (Lerner, Dowling, & Anderson, 2003). Recent studies examining the effects of PYD programs on youth development have found promising outcomes (Armour et al., 2013; Bowers et al., 2010; Fredricks & Eccles, 2006b; Lewin-Bizan et al., 2010; Mahoney, Parente, & Lord, 2007; Riley & Anderson-Butcher, 2012). Benefits for youth in PYD programs include increases in positive family and community interactions (Riley & Anderson-Butcher, 2012), self-worth (Ullrich-French & McDonough, 2013), academic success, and decreases in alcohol and drug use (Fredricks & Eccles, 2006b). Additionally, several studies have found that the more time youth invest participating in PYD programs, the better the outcomes (Agans & Geldhof,

2012; Denault & Poulin, 2009; Fredricks & Eccles, 2006b; Hansen & Larson, 2007; Rose-Krasnor, Busseri, Willoughby, & Chalmers 2006).

Higher intensity of participation, or continuous attendance, in PYD programs has been shown to decrease risky behaviors (Rose-Krasnor et al., 2006), increase commitment to academic endeavors, and promote positive social values in youth (Denault & Poulin, 2009; Fredricks & Eccles, 2006a). Additionally, studies have found a connection between the number of years youth participate in PYD programs and their developmental outcomes (Armour & Sandford, 2013; Hansen & Larson, 2007). Fredricks and Eccels (2006a) found that the longest attending participants in a PYD program reported more pro-social behaviors and were more successful in their academic achievements. In another study focusing on sport-based PYD programs, youth who were actively engaged in sports over a three-year period, and youth who participated in both team and individual sports, showed higher rates of positive development than did youth who did not participate in sport-based programs (Agans & Geldhof, 2012).

Considering the impact participation has on at-risk youth in PYD programs, examining the kinds of barriers that may negatively impact youth participation, and considering how those may be overcome, is an important direction for research. Understanding the barriers to participation and identifying other potential factors related to attrition may help program staff find ways to address the high dropout rate.

### **Positive Youth Development Programming**

PYD programs provide environments and activities that allow youth to take initiative over their own development and learn life skills (Larson, 2006). Programs that naturally bring about PYD, such as many after-school programs, may be established with the goal of promoting skills in a specific area such as sports, the arts, or community involvement, but unintentionally

promote positive changes in other aspects of youth's lives. However, many programs today are intentionally designed to foster PYD in participants.

Several frameworks for intentional PYD programs have been established since the concept was created nearly 20 years ago. Of these frameworks, one commonly used outline for PYD programs is the Five C's model created by Richard Lerner. In this model, youth gain life skills and abilities through participating in activities that foster personal characteristics of competence, confidence, connection, character, and caring (Bowers et al., 2010). The culmination of programs that promote development of the Five C's is to foster developmental characteristics that spur youth to contribute back to their communities.

The overall objective of programs designed around the Five C's model is to provide youth with the skills and relationships necessary to lead healthy lifestyles and "thrive", while also avoiding risks such as delinquency, alcohol and drug use, and mental health issues (Bowers et al., 2010). However, not all intentional PYD programs utilize the Five C's model and many programs choose to employ their own unique curriculum of principles or values. Regardless of the methods used to promote youth development, these principles or values such as the Five C's are guides for helping youth to gain life skills (Berlin, Dworkin, Eames, Menconi, & Perkins, 2007).

Despite the specific frameworks individual PYD programs may choose to employ, research would suggest that the success of PYD programs consists of multiple influential components. Specifically, successful programs promote activities that youth feel define who they are (Armour, et al., 2013); otherwise termed self-defining activities (Coatsworth et al., 2006). Additionally, these programs provide the opportunity for youth to develop and foster

positive relationships (Larson, 2006), and environments that encourage ongoing participation and engagement in the program (Agans & Geldhof, 2012).

### **Self-Defining Activities**

Active engagement by participants in program activities is essential for successful PYD outcomes. Ensuring youth engagement in programs can be done through providing activities that youth feel are expressive of their sense of self. These self-defining activities are more personally engaging to youth and allow for exploration of their emerging identities (Coatsworth et al., 2006). Armour et al., (2013) found that, among six key features of a successful PYD program, helping youth choose activities that are self-defining increases youths' engagement in and boosts the success of the program. Additionally, after-school programs that focus more time on self-defining activities and spend less time devoted to homework and non-self-defining activities were found to be more engaging to youth (Mahoney et al., 2007).

PYD programs provide opportunities that allow youth to become engaged in arts, sports, or church/community service activities (Hansen, Larson, & Dworkin, 2003). One of the major confounding factors for youth development programs is that youth self-select into these programs. That is, youth engage in programs that have some inherent interest to them in the first place and this initial motivation might have a great deal to do with the effects of the program. Program activities, especially those that are self-defining, are the means by which youth learn skills and build the relationships necessary for living healthy lifestyles (Brendtro & Strother, 2007; Eccles et al., 2003; Gatzemann, Schweizer, & Hummel, 2008). In a study conducted by Eccles (2003), findings suggest that different program activities will likely result in different developmental outcomes. For example, church based PYD programs and community service activities tend to decrease drug and alcohol use among youth while school sports programs tend

to lead to better academic outcomes but also increase drinking rates among participants. Therefore, programs working to improve specific outcomes in a population can increase the likelihood of achieving program goals through mindful program planning.

Because adolescence is a period during which youth are attracted to risk and testing limits, many successful PYD programs incorporate sports or outdoor adventure activities (Brendtro & Strother, 2007). Sports based PYD programs have been found to build confidence in youth and nurture pro-social beliefs (Jones, Dunn, Holt, Sullivan, & Bloom, 2011), as well as increase youth physical competence and foster feelings of belongingness (Anderson-Butcher et al., 2013). Additionally, sport based programs are an ideal avenue for allowing youth to set goals and monitor their progress, promoting a sense of ownership over their development (Armour et al., 2013).

Beyond the opportunities provided by after-school sport based programs, adventure based sport programs offer an additional dimension of challenge to PYD programs. Through physical and mental challenges, youth gain mastery and problem-solving skills, feelings of belongingness, autonomy, and increased compassion for others (Brendtro & Strother, 2007). In a study conducted by Gatzemann et al., (2008) adventure based learning experiences were found to increase participants' self-worth, self-esteem, interpersonal relationships, and social behaviors.

### **Meaningful Personal Relationships**

The relationships youth build while engaged in PYD activities have been shown to contribute to positive developmental outcomes (Armour et al., 2013; Larson, 2006; McDonough, Ullrich-French, Anderson-Butcher, Amorose, & Riley, 2013; Ullrich-French & McDonough, 2013). First, youth who develop positive personal relationships, both with peers and with non-parental adults within a PYD program, tend to be more engaged in the activities of the program

(Dawes & Larson, 2011). Additionally, youth who feel as though they belong within their peer group in a PYD program report increases in social competency and increased social responsibility (McDonough et al., 2013). In a study by Armour et al., (2013) the creation of positive relationships between participants, their peers, and mentors was described as an essential element of a successful PYD program.

Some programs may include a specific mentoring element, with youth assigned to work with identified adults or peers, while other programs may have less formalized adult-youth or peer relationship structure. In either case, the quality of the relationship that the youth develops with the adult plays an essential role in the success of PYD programs. Mentors help participants succeed by structuring and assisting youth through challenging situations, holding youth accountable, motivating participants, and helping the participants take ownership of their goals and outcomes within the program (Larson, 2006). Eccles et al., (2003) examined the connection between participation in PYD programs and the subsequent effect on substance use and academic outcomes. The findings of the study suggest that peer and mentor relationships are mediators for participants' engagement, and subsequent positive outcomes, such as better academic outcomes and less substance use in PYD programs.

### **Participation and Engagement**

The inclusion of self-defining activities and the building or structuring of meaningful personal relationships are critical components for successful PYD programs, but beyond those structural elements, youth must participate and be engaged in PYD activities in order for positive changes to occur. According to Weiss and colleagues (2005) participation in PYD programs is comprised of three key elements. First, youth must make the decision to enroll in a given program. However, it is the remaining two elements, participation and engagement in the

program activities, which foster PYD. Participation can be thought of as attendance in the program while engagement refers to the degree of involvement in the program activities.

**Participation.** Current research has identified a number of potential factors related to participation. Sharp and colleagues (2006) found that youth who were motivated to participate through engagement in self-defining activities, and who had parents who were interested in and supportive of the chosen activities, showed more interest in participating in program activities. Conversely, youth who did not find program activities to be self-defining, or who had parents who were controlling of the activities they were permitted to participate in, were less likely to be engaged in such program activities. Another study focusing on a physical activity-based PYD program found that youth with higher feelings of self-worth and higher perceptions of support from leaders in the program were more likely to re-enroll in a PYD program the following year (Ullrich-French & McDonough, 2013).

**Engagement.** To measure participants' experiences in programs in regards to engagement, a study by Hansen and colleagues (2003) examined the experiences of 450 adolescents participating in various organized PYD programs. The results of the study demonstrated that youth could learn positive life skills and decrease risky behaviors through various avenues such as sports, the arts, and church activities. Outcomes were not dependent on the type of program youth were involved in, but rather that the youth were actively involved in the activities offered by the program. However, engagement in program activities was more prominent for youth who reported greater positive developmental experiences and fewer negative developmental experiences (Hansen et al., 2003).

To measure positive and negative developmental experiences in PYD programs, extracurricular activities and after-school programs, Hanson and Larson (2005) created, and then

modified the Youth Experience Survey 2.0 (YES 2.0). The self-report survey measures both personal development outcomes that are likely to result from participation and engagement in programs (e.g., identity reflection, initiative, emotion regulation), as well as positive and negative process-oriented experiences that may be associated with developmental outcomes (e.g., social skills, teamwork skills, positive relationships) and experiences youth reported as negative (e.g., stress, social exclusion, negative group dynamics) (Hansen et al., 2003).

Hansen and Larson (2007) used their YES 2.0 survey to understand factors related to youth development and positive and negative experiences in organized PYD programs. They found that the time youth spent in programs, the roles of youth in these programs, and their motivation to be involved in the activities greatly affected their developmental outcomes and had a minimal effect on the negative experiences participants reported.

The roles youth hold in organized activities may foster feelings of identity development, which in turn may influence their motivation to remain involved in the programs. Eccles et al., (2003) found a link between youths participation in programs and positive outcomes when youth reported feeling as though they had experienced identity development while involved in the programs.

### **Factors Related to Attrition/Retention**

How can programs, which seem to foster engagement, relationship building and identity development, explain attrition? One simple explanation is that not all programs will foster these to the same extent with all youth. Youth who do not feel strongly connected to adults or peers, or youth who do not feel that the program activities are self-defining may not feel strongly engaged and may choose to stop participating. Alternatively, some research suggests that youth involved in well-structured PYD programs may still experience barriers to participation. These barriers

may stem from logistical issues, lack of support and various other needs of the youth that programs may fail to address (Armour et al., 2013; Dawes & Larson, 2011; Fredricks et al., 2010; Holt, Sehn, Spence, Newton, & Ball, 2012; McDonough et al., 2013; Sharp et al., 2006).

### *Logistical Barriers*

Logistical barriers may include such things as competing demands for one's time, timing of the program activities, transportation difficulties, lack of family support etc., that create constraints for youth being able to participate in a program. In a study examining adolescent participation in Boys and Girls Clubs, logistical barriers to participation included youth being involved in too many extracurricular activities, lack of interest in the program and external responsibilities such as homework and family obligations (Fredricks et al., 2010).

### *Parental Support*

Youth who are not supported in their decision to participate in a program will also find it harder to be involved in PYD activities. When youth feel a sense of belonging and emotional support, both from peers and program leaders, these social relationships help participants to feel engaged (Dawes & Larson, 2011; McDonough et al., 2013). Adolescents also need support from their parents or caregivers to participate in extracurricular programs. When parents are interested in the activities their children are involved in, youth are more motivated to attend and participate. However, when parents are controlling of the activities their children participate in, be it through restriction to participation or forcing their children to participate, youth experience negative feelings towards those activities. Thus, positive parental support is essential to allowing participants to feel supported and motivated to participate in PYD programs (Sharp et al., 2006).

### *Participant Experiences*

In addition to logistical issues and support, programs may experience attrition rates for other reasons. Armour et al., (2013) looked at participants' experiences in two PYD programs in the United Kingdom. They found that youth tend to remain enrolled in programs where the needs of the participants are matched to the goals of the programs. The more successful programs were not related to school, allowed youth to set goals for themselves and encouraged youth to choose activities that were personally expressive.

Programs that foster life-skills and decrease risky behaviors in adolescents can greatly impact the developmental trajectories of youth. However, even highly successful PYD programs experience attrition rates among participants. The purpose of this study is to better understand factors related to attrition in PYD programs. Specifically, this study will examine the experiences of youth enrolled in an outdoor experiential learning-based PYD program that uses snowboarding as an avenue for empowering youth to learn life-skills and avoid risky behaviors.

Although data show that barriers, support and experiences all predict attrition in youth programs, it is not entirely clear how these factors may combine or interact to predict whether youth remain in, or drop out of, a program. For example, it may be that among youth who have significant logistical barriers to participation, positive experiences within the program or whether the activities are self-defining help youth find ways to overcome those barriers. In contrast, for youth who have negative experiences and/or are not sensing that activities are self-defining, the level of barriers may not make a difference in predicting attrition.

### **SOS Outreach**

The Snowsports Outreach Society (SOS) is a PYD program that was founded in Vail, Colorado in the early 90's. The concept of the program is to use snowboarding as an educational

opportunity for learning about life-skills and promoting positive youth development (Berlin et al., 2007). Because the program works with middle school and high-school youth, the adventure-based nature of the program is engaging to many youths' interests. The program works with a model similar to that of Lerner's Five C's, and strives to promote the programs core values of "Courage, Discipline, Integrity, Wisdom and Compassion" (SOS Outreach, Unpublished).

The program targets youth who are at risk of not completing high school. Adolescents who have poor attendance records, low academic scores, and those who are minorities with English as a second language are candidates for the SOS program (SOS Outreach, Unpublished). While SOS has locations both nationally and internationally, the focus of this study will be participants enrolled in programs based out of Summit county and Eagle county, Colorado.

The framework of SOS is as a multi-year program. Youth can participate in single-day, multi-day and four-year programs. The purpose of the single day program is to introduce participants to snowboarding. For youth who choose to continue on, the multi-day program, Learn to Ride, offers participants five days of on-the-hill, snowboarding experience while being introduced to the organizations five core values. It is from this group of participants in the multi-day program that staff members refer youth as candidates for the extensive, four-year University program (SOS Outreach, Unpublished). This study will be examining participants enrolled in first or second year of the organization's four-year University program.

Participants who enroll in the University program make a four-year commitment and are expected to attend and participate in all program days and activities. Yet, not all students remain in the program for 4 years. During the first year of University, participants learn how to implement the core values into their daily lives while participating in various adventure sports

including snowboarding. They are also expected to work with a mentor to establish goals related to their personal lives, the program, and school. Additionally, the first year of the program introduces participants to learning opportunities through service work. The subsequent years of University follow a similar framework with additions each year (SOS Outreach, Unpublished).

The structure of the University program is comprised of several components of successful PYD programs. Youth are engaged in activities that promote identity development and that are personally meaningful to the youth (Armour et al., 2013; Hansen & Larson, 2007). Mentors provide youth with a non-parental relationship and keep participants responsible for their actions and attaining their individual goals (Eccles et al., 2003; Larson, 2006). Additionally, the group component of the program allows for participants to foster peer relationships and to develop pro-social values (Fredricks & Eccles, 2006b; Riley & Anderson-Butcher, 2012) and a sense of belonging (McDonough et al., 2013). The inclusion of the five core values, “Courage, Discipline, Integrity, Wisdom, and Compassion” (SOS Outreach, Unpublished), are similar to that of Lerner’s Five C’s; competence, confidence, connection, character, and caring (Bowers et al., 2010).

It is through this framework that participants in the University program learn life-skills and how to avoid risky behaviors. Data show, however, that the program experiences a high attrition rate and participants who drop out from the program do not gain the same positive developmental outcomes as their peers who complete the program. Therefore, it is important to understand the factors related to attrition within the University program. By understanding these factors, I hope to gain insight into ways in which SOS, or any PYD program, can help youth to remain engaged in PYD programs and overcome logistical barriers that may impact their participation.

## CURRENT STUDY

The goal of this study was to investigate how various factors predict uniquely, additively and interactively to whether youth dropout from the SOS University program. To gather information on participants' experiences, participation, and attendance within the SOS program, I distributed self-report questionnaires at the end of the program season, and then tracked whether youth returned to participate in the program the following fall. The study is guided by three hypotheses. First, based on findings from studies such as Fredricks et al., (2010) that logistical barriers are directly related to retention, I hypothesized that logistical issues such as program burden, time commitments, lack of parental support, and transportation barriers will predict participant retention.

Second, similar to findings that indicate that youth who do not feel connected to the activities offered by a program (Dawes & Larson, 2011) or who report negative experiences in a program are more likely to drop out (Hansen & Larson, 2007), I hypothesized that youth who reported self-defining activities that were similar to SOS-like activities (i.e. snowboarding, skiing, snow sport activities), reported greater positive developmental experiences, or reported fewer negative developmental experiences would be more likely to return the following year.

The third hypothesis tests the interactive effects of these predictors. I proposed that having an SOS-like self-defining activity or positive developmental experiences would moderate the associations between barriers and retention and the association between negative developmental experiences and retention. Specifically, I predict that among youth with high rates of logistical barriers, retention will be higher for youth who report positive developmental experiences and/or SOS-like self-defining activities. Likewise, I predict that among youth with

high rates of negative developmental experiences, retention will be higher when they also report more positive developmental experiences and/or have SOS-like self-defining activities.

## METHOD

### **Participants**

Participants were 88 adolescents from 9 to 17 years of age ( $M_{age} = 11.70$ ;  $SD = 1.68$ ) who had participated in the SOS Outreach University programs in Eagle County and Summit County during the fall and winter of 2013-2014. Fifty-five percent of the participants were from Eagle County. The sample included more males than females (62% male). The sample was ethnically diverse with 45% of adolescents reporting as Hispanic, 44% White, non-Hispanic, 4% Asian American, and 7% as other. The majority of participants lived in two parent homes (80%), and 46% of mothers had completed college or professional school after college. Youth were enrolled in the SOS Outreach University program if they had been identified as high-risk for not completing high school and had completed the five-day, Learn to Ride program.

### **Procedure**

All procedures were approved by the Colorado State University Institutional Review Board. Participants in the first and second year of SOS Outreach University program from Eagle County and Summit County CO, were eligible to participate. SOS Outreach Staff provided a list of names and contact information for each of the participants in these two program sites. The youth were informed of the study and invited to participate at the program's end of the year ceremony in April. A packet including the survey, a parental consent form, youth assent form, and copies of the consent and assent forms, in addition to a cover letter and a self-addressed, stamped return envelope were mailed to participants following the end of the program year. Participants were asked to read over the materials in the packet and complete and return the consent forms and survey. A second wave of surveys was sent to all participants who had not returned information by the end of the summer.

## **Measures**

### *Demographic Information*

Participants were asked to provide basic information about their gender, age, grade in school, and ethnic or racial identity. They were also asked to signify whom they live with for most of the year as well as the educational level of both of their parents.

### *Barriers to Participation*

For the purpose of this study, I created a 9-item questionnaire measuring barriers to participation. The questions were based on previous research suggesting various logistical issues that may prevent participants from attending program activities (Fredricks et al., 2010, Sharp et al., 2006). Participants were asked to answer each question on a 3-point Likert-type scale (1 = Yes, 2 = Sometimes, 3 = No). Items created for this questionnaire included: “I have too many responsibilities at home to go to SOS Outreach activities”, and “My family can’t afford the transportation to SOS Outreach activities”. These questions were reduced to four subscales representing demand of the program (1 item), parent and peer encouragement to participate in the program (2 items), external responsibilities (2 items), and transportation issues (2 items). Additionally, participants were asked the single question if they intended to return to the SOS Outreach program the following year (1 = Likely, 2 = Unsure, 3 = Unlikely). Reliability for this measure is adequate given the number of items per subscale with  $\alpha = .58$  for encouragement subscale,  $\alpha = .72$  for responsibilities subscale,  $\alpha = .68$  for transportation subscale, and  $\alpha = .75$  for a total score that included all barrier items.

### *Parental Support*

Because past research suggests a connection between parental support and PYD activity involvement, the participants in this survey were asked to complete a measure of parental

support for activity involvement (Sharp, Palen, & Coatsworth, under review). The Parenting for Identity Exploration (PIE) was a fourteen-item measure with seven identical questions for each parent. Youth were asked to choose the answer that best explained each of their parents. They were asked to answer each item, in response to both their mothers and their fathers, (unless they only lived with one parent) on a 5-point Likert-type scale (1 = completely disagree, 5 = completely agree). Sample items included: “My mother pressures me to participate in an activity or interest even if it is something I don’t enjoy” and “My father encourages me to try out different activities and interests”. Reliability for this measure is reported to be good (Sharp et al.) and for this sample it was also adequate with  $\alpha = .78$  for youth report of mother and  $\alpha = .77$  for report of father.

#### *Positive and Negative Developmental Experiences*

Youth were asked to provide information regarding developmental outcomes and negative experiences through answering the Youth Experiences Survey 2.0 (YES 2.0; Hansen & Larson, 2005). The survey measured positive developmental experiences such as, identity experiences, development of skills, relationship building, and social skills and negative experiences such as stress of participation, relational issues with other participants and negative peer influences. Respondents answered questions based on a 1 – 4 scale (1 = Yes, definitely, 4 = Not at all). Sample items included: “I set goals for myself in this activity”, and “This activity got me thinking about who I am”. Global scales for positive and negative experiences or subscales can be computed.

Hansen and Larson (2005) tested the validity for this measure through examining discrepancies in answers between responses provided by youth participants and leaders in a PYD program. Results indicated that there was a consensus between youth and adults regarding

which developmental experiences were offered through the program and the measures ability to capture the relationships between the experiences and positive and negative development. The reliability for the measure was confirmed through examining the intercorrelations among scales. The internal consistency reliability coefficient (for each of the scales was statistically significant ranging from .75 to .94 (Hansen & Larson, 2005). For this sample, reliability was also adequate with  $\alpha = .95$  for positive developmental experiences and  $\alpha = .93$  for negative developmental experiences.

### *Self-Defining Activities*

Participants were asked to identify two activities that they would use to define themselves to others. This form of “self-defining activities” has been one method by which studies have found the kinds of activities that youth find most meaningful (Coatsworth et al., 2006). Listed activities can be coded and experiences within different classes of activities can be examined (Coatsworth et al., 2006). In this study, I followed procedures outlined by Coatsworth et al., but adapted the coding categories. Activities were coded into the following eleven categories: Social, Individual/Passive, Instrumental, Snowsports, Other sports/Physical Activity, Team Sports, Wilderness, Performing Arts, Individual Literary/Artistic, Church/Religious Activities, and Volunteer work. Three independent coders coded each activity with agreement ranging from 84% to 90%. All three coders agreed on 79% of the activities. Discrepancies were resolved by committee consensus.

### *Participant Return*

For the purpose of this study I examined both whether participants planned to return to the program and if they actually did. Participants’ plan to return was collected in the Barriers to Participation measure using a single item in which participants rated their plan to return as likely,

unlikely or unsure. To determine who actually returned to the program the following year SOS Outreach staff provided information on which participants had returned to the program and which participants had dropped out.

## RESULTS

Preliminary analyses investigated distributions of the main variables of interest as well as bivariate correlations among main variables and demographics. Results are presented in Table 1. As indicated in Table 1, youth retention was significantly and negatively associated with program demands and negative experiences. In addition, negative experiences in the program were significantly and positively correlated with demand, encouragement, responsibility and transportation. Positive experiences were negatively associated with demand but positively associated with transportation. The barriers were generally positively and significantly associated with each other. Finally, Mothers and Fathers report for identity exploration were generally negatively associated with barriers and negative experiences and positively associated with positive experiences.

**Table 1**  
*Correlations*

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Participant Return	--												
2. Likelihood to Return	.51**	--											
Logistics													
3. Demand	-.40**	.39**	--										
4. Encouragement	-.09	.16	.38**	--									
5. Responsibility	-.10	.24*	.51**	.35**	--								
6. Transportation	-.06	.09	.19	.37**	.21	--							
Parenting for Identity Exploration													
7. Mothers	.08	-.24*	-.30**	-.23*	-.36**	-.14	--						
8. Fathers	.17	-.19	-.34**	-.18	-.26*	-.12	.76**	--					
9. SOS-Like Activity	-.14	.09	.14	-.10	-.11	.15	.05	.02	--				
Developmental Experiences													
10. Positive	.12	-.39**	-.29**	-.13	-.10	.25*	.38**	.27*	-.04	--			
11. Negative	-.28**	.26*	.40**	.43**	.62**	.25*	-.31**	-.35**	-.17	-.07	--		
12. Mothers' Education	-.18	.20	-.04	-.36**	-.18	-.28**	.09	.14	.17	-.10	-.21	--	
13. Participant Age	-.14	.06	.02	-.02	.09	-.05	-.11	-.24*	.00	-.11	-.02	-.22*	--
<i>M</i>			1.54	2.48	2.84	4.82	28.84	28.11		121.94	16.85	4.08	11.70
<i>SD</i>			.69	.96	1.08	2.04	4.36	4.89		23.63	7.73	1.52	1.68

\* =  $p < .05$ , \*\* =  $p < .01$

To test the first hypothesis, that logistical issues such as program burden, time commitments, lack of parental support, and transportation barriers will predict participant attrition, I conducted a logistic regression analysis. The analysis tested if the barriers

individually and in combination could predict whether participants returned or not, after controlling for Mother education and youth age. Table 2 presents results of the logistic regression. The full model for this analysis was tested against a constant only model and was found to be statistically significant, indicating that barriers and the control variables did successfully distinguish between whether participants returned or not ( $X^2 = 17.83, p < .01$  with  $df = 6$ ). Nagelkerke's  $R^2$  (.394) showed a weak to moderate relationship between prediction and grouping. However, success of predictions overall was 84.7%, with the success for predicting participant return as 96.4% and the prediction of non-returners as 47.1%. The Wald criterion showed demand as the only significant predictor of participant returns the following year [Wald  $F(1, 88) = 9.50, p = .002$ ]. Although not significant, there was a trend towards significance in relation to mothers' education predicting return [Wald  $F(1, 86) = 3.19, p = .074$ ]. All other levels of barriers were not significant predictors of retention.

**Table 2**  
*Logistic Regression Analysis: Logistical Issues Predicting Participant Retention*

	Model 1					Model 2				
	B	SE	Wald	Sig	Exp(B)	B	SE	Wald	Sig	Exp(B)
<i>Age</i>	-.21	.20	1.09	.297	.81	-.40	.27	2.27	.13	.67
<i>Mothers Education</i>	-.40	.23	3.13	.08	.67	-.59	.33	3.19	.07	.55
<i>Logistics</i>										
<i>Demand</i>						-2.10	.68	9.50	.00	.12
<i>Encouragement</i>						.41	.52	.64	.43	1.51
<i>Responsibility</i>						.35	.40	.75	.39	1.42
<i>Transportation</i>						-.24	.19	1.48	.23	.79
<i>Parenting for Identity Exploration</i>										
<i>Mothers</i>						-.04	.11	.10	.75	.97
<i>Fathers</i>						.09	.10	.74	.39	1.09

I also conducted several secondary analyses to examine how the factors in the main logistic regression analyses were related to youth's report of intent to return at the end of the season. I first conducted a Chi Square analysis to examine the association between participants' reports of their likelihood of returning the following year, and whether they actually returned to

SOS in the fall. Results indicate a significant association between intent to return and returning ( $X^2 = 25.04, p < .001$  with  $df = 2$ ). Of those who said they were likely to return the following year ( $n=54$ ), 90% actually returned. For those who replied “unsure” ( $n=24$ ), only 54.2% returned. However, of the participants who stated they were unlikely to return ( $n=5$ ), all of them did not return the following year. Overall, 94% of the respondents reported being likely or unsure of returning, with 73.5% actually returning the following year. This suggests that SOS may be able to determine with fair confidence if participants will re-enroll the following year by collecting responses about youth intentions at the end of the first program year.

To test whether intent to return was associated with barriers, I conducted a second logistical regression analysis. This tested whether barriers predicted intent to return after controlling for mother education and youth age. Because the number of participants who reported that they were unlikely to return was so small, I combined that group with the unsure group. Table 3 presents results of the logistic regression. The full model for this analysis was tested against a constant only model and was found to be statistically significant. This indicated that the predictors reliably distinguished between whether participants returned or not ( $X^2 = 22.703, p < .01$  with  $df = 8$ ). Nagelkerke’s  $R^2$  (.376) showed a weak to moderate relationship between prediction and grouping. However, success of predictions overall was 76.1%, with the success for predicting participant intent to return as 87% and the prediction of unsure and unlikely to return as 56%. The Wald criterion showed demand [Wald  $F(1, 88) = 3.83, p = .05$ ] and mothers parenting for identity exploration [Wald  $F(1, 88) = 5.61, p = .02$ ] as the only significant predictors of participants’ intention to return the following year. Although not significant, there was a trend towards significance in relation to mothers’ education predicting

intent to return [Wald  $F(1, 86) = 3.47, p = .06$ ]. All other levels of barriers were not significant predictors for participant return.

**Table 3**  
*Logistic Regression Analysis: Logistical Issues Predicting Participant Likelihood to Return*

	Model 1					Model 2				
	B	SE	Wald	Sig	Exp(B)	B	SE	Wald	Sig	Exp(B)
<i>Age</i>	.14	.18	.62	.43	1.15	.06	.23	.08	.78	1.07
<i>Mothers Education</i>	.30	.19	2.54	.11	1.35	.49	.27	3.47	.06	1.64
<i>Logistics</i>										
<i>Demand</i>						1.05	.54	3.83	.05	2.86
<i>Encouragement</i>						-.26	.43	.38	.54	.77
<i>Responsibility</i>						.39	.36	1.16	.28	1.48
<i>Transportation</i>						-.04	.17	.05	.82	.96
<i>Parenting for Identity Exploration</i>										
<i>Mothers</i>						-.33	.14	5.61	.02	.72
<i>Fathers</i>						.14	.11	1.54	.22	1.15

To test the second hypotheses, that self-defining activities and developmental experiences, both positive and negative, would impact whether participants returned to the program the following year, I conducted a logistic regression analysis with self-defining activities as well as positive and negative developmental experiences within the program predicting retention after controlling for Mother education and youth age. Results are presented in table 4. The full model for this analysis was tested against a constant only model and was found to be statistically significant. This indicated that the predictors reliably distinguished between participants who returned and those who did not return ( $X^2 = 13.834, p < .01$  with  $df = 3$ ). While Nagelkerke's  $R^2$  (.299) showed a relatively weak relationship between prediction and grouping, success of predictions overall was 80.7%. The success for predicting participant return was 95.2% while prediction of non-returners was only 31.8%. The Wald criterion showed negative developmental experiences [Wald  $F(1, 88) = 9.42, p = .00$ ] and mothers' education [Wald  $F(1, 88) = 5.05, p = .03$ ] as the only significant predictors of participant retention. Self-defining activities and positive developmental experiences were not significant predictors.

**Table 4**

*Logistic Regression Analysis: Self-defining Activities, Positive Developmental Experiences, and Negative Developmental Experiences Predicting Participant Return*

	Model 1					Model 2				
	B	SE	Wald	Sig	Exp(B)	B	SE	Wald	Sig	Exp(B)
<i>Age</i>	-.23	.16	2.05	.15	.79	-.26	.18	2.16	.14	.77
<i>Mothers Education</i>	-.38	.20	3.59	.06	.69	-.55	.24	5.05	.03	.58
<i>SOS-Like Activity</i>						-.85	.61	1.92	1.7	.43
<i>Developmental Experiences</i>										
<i>Positive</i>						.01	.01	.94	.33	1.01
<i>Negative</i>						-.13	.04	9.42	.00	.88

Because of the lack of significant findings for self-defining activities, I conducted an exploratory secondary analysis. A cross-tabulation analysis compared participants who reported SOS-like activities as self-defining and if they returned to the program the following year. The results of this analysis are not statistically significant, ( $X^2 = 1.64$ , *ns* with  $df = 1$ ) yet are counterintuitive to our hypothesis. Results indicated that 61% of youth who did not return listed an SOS-like self-defining activity, compared to 45% of youth who did return.

The third hypothesis, that the relationship between barriers and participant retention and the relationship between negative experiences and retention would be moderated by positive developmental experiences or by SOS-like self-defining activities, was tested using separate hierarchical logistic regression analysis with interaction terms entered in the final step. Because demand was the only barrier variable that predicted retention I elected to use that single subscale in the following analyses. Prior to running the logistic regression analysis, I examined the associations between negative developmental experiences and demand and found that they were only modestly correlated ( $r = .40$ ), so both were entered into the logistic regressions.

A logistic regression analysis was performed predicting retention by Demand, Negative Developmental Experiences, Self-defining Activities and Positive Developmental Experiences and testing for interactions between Demand and Self-defining activities after controlling for

Mother education and youth age. Results are presented in table 5. The full model for this analysis was tested against a constant only model and was found to be statistically significant. This indicated that the predictors reliably distinguished between dropout and return ( $X^2 = 28.67$ ,  $p < .01$  with  $df = 7$ ). While Nagelkerke's  $R^2$  (.45) showed a relatively weak relationship between prediction and grouping, success of predictions overall was 82.5%. The success for predicting participant return was 93.3% and prediction of non-returners was only 50%. The Wald criterion showed that demand [Wald  $F(1, 88) = 7.15$ ,  $p = .01$ ] and negative developmental experiences [Wald  $F(1, 88) = 3.88$ ,  $p = .05$ ] were the only significant predictors of retention. Similar to previous analyses, mothers' education was also a significant predictor of retention [Wald  $F(1, 88) = 6.06$ ,  $p = .01$ ].

**Table 5**

*Logistic Regression Analysis: Demand, Negative Developmental Experiences, SOS Activities, Positive Developmental Experiences, and Activity by Demand interaction predicting Retention*

	Model 1					Model 2				
	B	SE	Wald	Sig	Exp(B)	B	SE	Wald	Sig	Exp(B)
<i>Age</i>	-.32	.19	2.79	.10	.73	-.31	.19	2.65	.10	.73
<i>Mothers Education</i>	-.69	.28	5.97	.02	.50	-.71	.29	6.06	.01	.49
<i>Self-Defining activity</i>	1.04	.70	2.19	.14	2.83	1.18	.77	2.35	.13	3.24
<i>Developmental Experiences</i>										
<i>Positive</i>	.20	.33	.38	.54	1.22	.20	.32	.37	.55	1.22
<i>Negative</i>	-.72	.36	3.91	.05	.49	-.72	.36	3.88	.05	.49
<i>Logistics</i>										
<i>Demand</i>	-.98	.37	7.14	.01	.38	-1.03	.39	7.15	.01	.36
<i>Interaction</i>										
<i>ActivityXDemand</i>						.19	.35	.30	.58	1.21

A second logistic regression analysis was performed predicting retention by Demand, Negative Developmental Experiences, Self-defining Activities and Positive Developmental Experiences and testing for interactions between Negative Developmental Experiences and Self-defining activities after controlling for Mother education and youth age. Results are presented in table 6. The full model for this analysis was tested against a constant only model and was found

to be statistically significant. This indicated that the predictors reliably distinguished between dropout and return ( $X^2 = 31.87, p < .01$  with  $df = 7$ ). While Nagelkerke's  $R^2$  (.49) showed a relatively weak relationship between prediction and grouping, success of predictions overall was 82.5%. The success for predicting participant return was 93.3% and prediction of non-returners was only 50%. The Wald criterion showed that negative developmental experiences [Wald  $F(1, 88) = 3.12, p = .08$ ] was trending toward a significant predictor of retention and demand [Wald  $F(1, 88) = 7.72, p = .01$ ] was a significant predictor of retention. Similar to previous analyses, mothers' education was also a significant predictor of retention [Wald  $F(1, 88) = 5.94, p = .02$ ].

**Table 6**

*Logistic Regression Analysis: Demand, Negative Developmental Experiences, SOS Activities Positive Developmental Experiences and Activity by Negative Experiences predicting Retention*

	Model 1					Model 2				
	B	SE	Wald	Sig	Exp(B)	B	SE	Wald	Sig	Exp(B)
Age	-.32	.19	2.79	.10	.73	-.32	.21	2.35	.13	.73
Mothers Education	-.69	.28	5.97	.02	.50	-.77	.32	5.94	.02	.47
SOS-Like Activity	1.04	.70	2.19	.14	2.83	.86	.70	1.53	.22	2.37
Developmental Experiences										
Positive	.20	.33	.38	.54	1.22	.13	.35	.14	.71	1.14
Negative	-.72	.36	3.91	.05	.49	-.73	.42	3.12	.08	.48
Logistics										
Demand	-.98	.37	7.14	.01	.38	-1.15	.42	7.72	.01	.32
Interaction										
ActivityXNegative						-.71	.41	3.00	.08	.49

The interaction between Negative experiences and Self-defining activities was not statistically significant at the conventional  $p < .05$  level, but showed a trend [Wald  $F(1, 86) = 3.00, p < .10$ ]. Given this level of association, I chose to explore this interaction in post-hoc analyses. I conducted two additional logistic regression analyses, one including those participants who identified an SOS-like Self-defining activity, and those who did not. Negative experiences was not a significant predictor of retention for those who did not identify a self-defining activity [Wald  $F(1, 43) = .40, ns.$ ], but was a significant predictor for those participants

who did [Wald  $F(1, 42) = 4.80, p = .028$ ]. Partitioning this interaction further, participants were classified as high or low on negative experiences based on a median split and then I examined retention rates for those groups contingent on whether they listed an SOS-like self-defining activity. Figure 1 presents these results. Among youth who did not report an SOS activity, there was a modest and non-statistically significant difference in retention rates; 90% for the low negative experiences group and 71% for the high negative experiences group ( $\chi^2(1, N = 43) = 2.23, ns$ ). Among youth who did report an SOS-like self-defining activity, the association between negative experiences and retention was significant ( $\chi^2(1, N = 42) = 7.463, p < .01$ ), with 84% for the low negative experiences group retaining, but only 44% for the high negative experiences group. This finding is counter to my prediction that having a self-defining activity would protect against drop out.

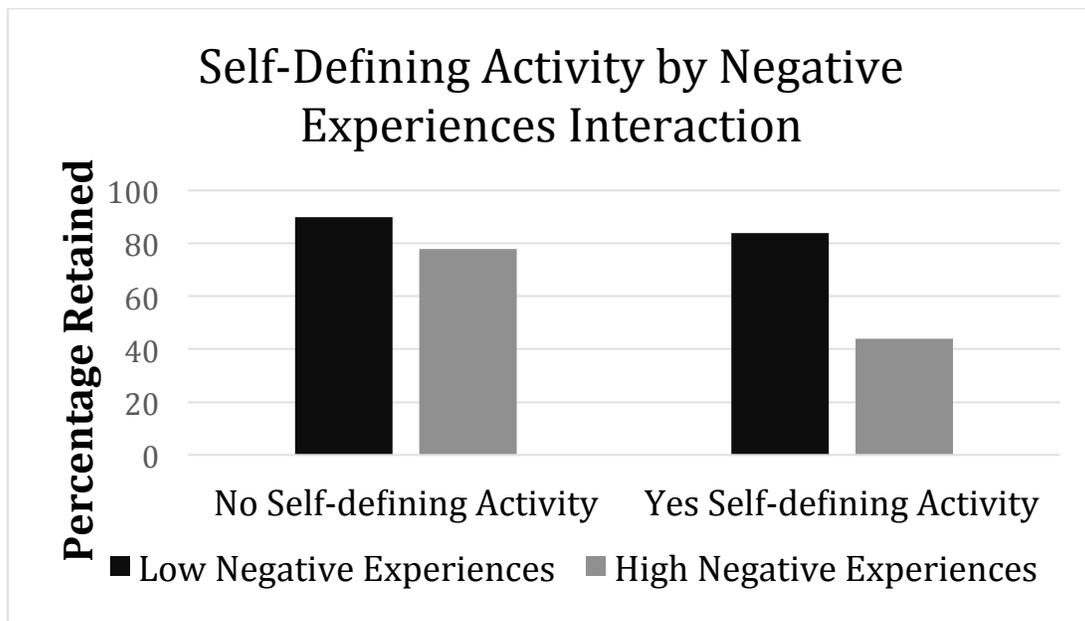


Figure 1: Self-Defining Activity by Negative Experiences Interaction

I also tested two models that included; 1) the interaction between positive experiences and barriers and 2) the interaction between positive experiences and negative experiences. Neither interaction term was statistically significant. Details of these analyses are not presented here.

## DISCUSSION

This study examined factors related to participant retention or dropout from a PYD program for at-risk youth. The results of this study provide promising findings in predicting participant retention in PYD programs. Three main findings emerged from this analysis. First, the extent to which youth feel the demands of PYD programs are high, the levels of home and school responsibilities for youth might interfere with participation, and parental encouragement for identity exploration are significantly related to participant retention. Second, negative developmental experiences, but not positive developmental experiences within the program were significant predictors of participant retention while program specific self-defining activities were not. Third, although I predicted that program specific self-defining activities would moderate the relationship between logistical issues and participant retention, results did not support this. The interaction between program specific self-defining activities and negative experiences within the program, however, did show a trend toward becoming a significant predictor of retention ( $p < .10$ ).

Retention in PYD programs is a critical issue, because studies have demonstrated that participation for multiple years benefits youth the most (Fredricks and Eccels, 2006a). Youth who drop out of programs may not acquire the same skills and benefits of youth who participate for a longer amount of time. Results from this study identify three important factors that are related to youth retention: demand of the program, negative developmental experiences, and parental encouragement for identity exploration. Of the participants in this study, those who reported they were unsure or unlikely to return to the program in the fall also reported higher perceived demand of the program and higher external responsibilities related to the home and school. The relationship between external responsibilities and participant dropout found in this

study is consistent with findings from other studies where responsibilities outside of the program influenced participant retention (Fredricks et al., 2010). Finding the appropriate level of activities that encourage and demand engagement from the youth, but are not so demanding that they place an undue burden on youth is a challenging endeavor for program planners. Today's youth are often scheduled in to many different activities (Fredricks et al., 2010), which can compete against each other for the youth's time.

Although the primary analyses focused on whether youth returned to participate several months following the end of their season, I conducted post-hoc analyses that indicated youth may already have a very good idea at the end of the season of whether they will return the following year. Similar factors predicted intent at the end of the year and actual retention the following fall. It may be that attending to the process of how youth are experiencing the PYD intervention, in addition to whether they are reporting high competing demands and feeling supported from family influences retention.

Results also showed that parental encouragement for youth to participate as a way of exploring their emerging identity significantly predicted intent to continue participating. Specifically, the Parenting for Identity Exploration Mother scores were lower for those who were unsure or unlikely to return to the program in the fall. This suggests that youth who receive more encouragement to participate in PYD programs will be more likely to state that they are likely to return to the program in subsequent years. These findings are consistent with previous research suggesting that parental support is related to youth participation in PYD programs (Sharp et al., 2006). This factor was not a significant predictor of actual retention. It may be that positive encouragement is helpful for youth when they are considering whether to continue

participating, but it is less important than actual demands when youth have to decide for certain if they will continue to attend.

Results also indicated that youth experiences within the program are important predictors of retention. Similar to others who found that program processes predict retention (Hellison & Wright, 2003), this study indicated that positive developmental experiences, such as identity development and positive relationships provided a context that youth seemed to enjoy and increased the likelihood that they would come back. In contrast, negative developmental experiences for youth, such as social exclusion or stress, were very strong negative predictors of retention, similar to results from Hansen and Larson (2005).

I also predicted that youth who reported SOS-like activities as self-defining would be more likely to return, but this was not supported. This finding is counter to other studies that showed a significant relationship between self-defining activities and youth engagement in the program (Mahoney et al., 2007). In this study, a higher percentage of youth who dropped out of the program activities reported SOS-like activities as self-defining (61%), than those who reported SOS-like activities as self-defining and returned to program the following year (45%). One possible explanation for this is that, consistent with other literature that suggests the types of activities, such as sports, allow youth to become engaged (Hansen et al., 2003), perhaps youth who did report SOS-like activities as self-defining, yet who dropped out, did not find the demands of the program worth the reward of participating in this type of activity through the program. Additionally, youth who did not report SOS-like activities as self-defining, yet who returned to the program, may have remained engaged because this program offers novel activities that they may not be able to engage in elsewhere. Thus, it may be that these counterintuitive findings are the result of the uniqueness of the program being studied, which

offers free snowboarding to participants, and the participants, who are mostly low-income youth, are less likely to have access to these activities otherwise.

Results did indicate that there is a relationship between self-defining activities and negative experiences in the program in relation to retention. For youth who did not report an SOS-like self-defining activity, any negative experiences they reported did not influence whether they came back to the program the following year. However, for youth who listed an SOS-like self-defining activity, those who reported high negative experiences were much less likely to return to the program than those who didn't report negative experiences. Although I predicted that SOS-like self-defining activities would act as a protective factor for participant retention, SOS-like self-defining activities in combination with negative experiences actually decreases participant retention. One explanation for this is that youth who self-define with these program activities yet experience negative outcomes in the program determine that they can continue to participate in these self-defining activities outside of the program to avoid further negative experiences.

I also predicted that reporting SOS-like self-defining activities would moderate the association between barriers to participation and retention. Self-defining activities provide a strong sense of intrinsic motivation that hypothetically could drive youth to find alternatives to surmount perceived barriers. However, results did not support this hypothesis.

It is important to consider how generalizable these findings are across PYD programs. The youth in this program live in a specific geographical region and are drawn from a specific population of underprivileged youth from primarily Hispanic and White racial/ethnic groups. Although the response rate for the surveys in this study was low, the sample demographics are roughly comparable to those of the population of youth from which it was recruited.

Additionally, cultural factors should be taken into consideration regarding these findings and given the specific nature of the sample, might not generalize to samples composed of different racial majorities from different locations.

## LIMITATIONS AND FUTURE DIRECTIONS

The findings of this study provide some insight into the factors that influence participant retention in a PYD program and possible areas of focus for future research. The survey allowed for participants to report two self-defining activities. Although it was telling to examine the total number of participants who reported SOS-like self-defining activities, in future studies it would be interesting to have participants report on the specific program activity in addition to their own self-defining activity. This would allow for a comparison between the reported personal expressiveness of the program activity and the additional self-defining activity the participants include.

The results of this study did not portray self-defining activities as significant, as I hypothesized they would be. Considering that this activity may be novel to many of the participants, one possible explanation for this finding may be that it takes repeated exposure to an activity over time before it is considered self-defining. Future research may benefit from examining how often one must participate in an activity before it is self-defining to the individual.

There are several limitations to this study, however, that must be taken into consideration. First, the response rate for this study was 37%, which may have biased the final results. The retention rate found in this study was slightly larger than typically found in SOS, meaning that more youth who actually dropped out of the program did not respond. In future studies with this population, alternate procedures that embed the data collection into program activities could have beneficial effects on the response rate.

Errors in procedures for completing the survey online led to a small proportion of participants missing some data. Missing data is a challenge that can be overcome with statistical

procedures that can alleviate, but may not entirely correct for missingness. Despite these limitations, the study provides some useful information for PYD programmers regarding types of external barriers and internal processes that may need to be addressed in order to increase retention of youth in their programs.

## REFERENCES

- Agans, J. P., & Geldhof, G. (2012). Trajectories of participation in athletics and positive youth development: The influence of sport type. *Applied Developmental Science, 16*, 151-165. doi:10.1080/10888691.2012.697792
- Anderson-Butcher, D., Iachini, A., Riley, A., Wade-Mdivanian, R., Davis, J., & Amorose, A. J. (2013). Exploring the impact of a summer sport-based youth development program. *Evaluation and program planning, 37*, 64-69.
- Armour, K., & Sandford, R. (2013). Positive youth development through an outdoor physical activity programme: evidence from a four-year evaluation. *Educational review, 65*(1), 85-108.
- Armour, K., Sandford, R., & Duncombe, R. (2013). Positive youth development and physical activity/sport interventions: Mechanisms leading to sustained impact. *Physical Education And Sport Pedagogy, 18*, 256-281. doi:10.1080/17408989.2012.666791
- Berlin, R. A., Dworkin, A., Eames, N., Menconi, A., & Perkins, D. F. (2007). Examples of sports-based youth development programs. *New directions for youth development, 2007*(115), 85-106.
- Bowers, E. P., Li, Y., Kiely, M. K., Brittan, A., Lerner, J. V., & Lerner, R. M. (2010). The five Cs model of positive youth development: A longitudinal analysis of confirmatory factor structure and measurement invariance. *Journal of youth and adolescence, 39*, 720-735.
- Brendtro, L. K., & Strother, M. A. (2007). Back to Basics Through Challenge and Adventure. *Reclaiming Children & Youth, 16*.
- Coatsworth, J. D., Palen, L. A., Sharp, E. H., & Ferrer-Wreder, L. (2006). Self-defining activities, expressive identity, and adolescent wellness. *Applied Developmental Science, 10*(3), 157-170.
- Dawes, N. P., & Larson, R. (2011). How youth get engaged: Grounded-theory research on motivational development in organized youth programs. *Developmental psychology, 47*, 259.
- Denault, A. S., & Poulin, F. (2009). Intensity and breadth of participation in organized activities during the adolescent years: Multiple associations with youth outcomes. *Journal of Youth and Adolescence, 38*, 1199-1213.
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of social issues, 59*, 865-889.

- Fredricks, J. A., & Eccles, J. S. (2006a). Extracurricular involvement and adolescent adjustment: Impact of duration, number of activities, and breadth of participation. *Applied Developmental Science, 10*, 132-146.
- Fredricks, J. A., & Eccles, J. S. (2006b). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*, 698-713. doi:10.1037/0012-1649.42.4.698
- Fredricks, J. A., Hackett, K., & Bregman, A. (2010). Participation in boys and girls clubs: Motivation and stage environment fit. *Journal of Community Psychology, 38*, 369-385.
- Fredricks, J. A., & Simpkins, S. D. (2012). Promoting positive youth development through organized after-school activities: Taking a closer look at participation of ethnic minority youth. *Child Development Perspectives, 6*, 280-287. doi:10.1111/j.1750-8606.2011.00206.x
- Gatzemann, T., Schweizer, K., & Hummel, A. (2008). Effectiveness of sports activities with an orientation on experiential education, adventure-based learning and outdoor-education. *Kinesiology, 40*, 146-152.
- Hansen, D. M., & Larson, R. W. (2007). Amplifiers of developmental and negative experiences in organized activities: Dosage, motivation, lead roles, and adult-youth ratios. *Journal of Applied Developmental Psychology, 28*, 360-374.
- Hansen, D. M., & Larson, R. (2005). The youth experience survey 2.0: instrument revisions and validity testing. *Urbana-Champaign, IL: University of Illinois*.
- Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of research on adolescence, 13*, 25-55.
- Hellison, D., & Wright, P. (2003). Retention in an urban extended day program: A process-based assessment. *Journal of teaching in physical education, 22*(4), 369-381.
- Holt, N. L., Sehn, Z. L., Spence, J. C., Newton, A. S., & Ball, G. D. (2012). Physical education and sport programs at an inner city school: exploring possibilities for positive youth development. *Physical Education & Sport Pedagogy, 17*, 97-113.
- Jones, M. I., Dunn, J. G., Holt, N. L., Sullivan, P. J., & Bloom, G. A. (2011). Exploring the '5Cs' of Positive Youth Development in Sport. *Journal of Sport Behavior, 34*.
- Larson, R. (2006). Positive youth development, willful adolescents, and mentoring. *Journal of community psychology, 34*, 677-689.

- Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3), 172-180.
- Lewin-Bizan, S., Bowers, E. P., & Lerner, R. M. (2010). One good thing leads to another: Cascades of positive youth development among American adolescents. *Development and psychopathology, 22*, 759-770.
- Mahoney, J. L., Parente, M. E., & Lord, H. (2007). After-School Program Engagement: Links to Child Competence and Program Quality and Content. *The Elementary School Journal, 107*, 385-404.
- McDonough, M. H., Ullrich-French, S., Anderson-Butcher, D., Amorose, A. J., & Riley, A. (2013). Social responsibility among low-income youth in physical activity-based positive youth development programs: Scale development and associations with social relationships. *Journal Of Applied Sport Psychology, 25*, 431-447. doi:10.1080/10413200.2012.751563
- Pearce, N. J., & Larson, R. W. (2006). How Teens Become Engaged in Youth Development Programs: The Process of Motivational Change in a Civic Activism Organization. *Applied Developmental Science, 10*, 121-131. doi:10.1207/s1532480xads1003\_2
- Ramey, H. L., & Rose-Krasnor, L. (2012). Contexts of structured youth activities and positive youth development. *Child Development Perspectives, 6*, 85-91.
- Riley, A., & Anderson-Butcher, D. (2012). Participation in a summer sport-based youth development program for disadvantaged youth: Getting the parent perspective. *Children and Youth Services Review, 34*, 1367-1377.
- Rose-Krasnor, L., Busseri, M. A., Willoughby, T., & Chalmers, H. (2006). Breadth and intensity of youth activity involvement as contexts for positive development. *Journal of Youth and Adolescence, 35*, 365-379.
- Ryff, C. D. (2013). Eudaimonic well-being and health: Mapping consequences of self-realization. In A. S. Waterman (Eds.), *The Best Within us; Positive psychology perspectives on eudaimonia* (77-98). Washington, DC, US: American Psychological Association.
- Sharp, E. H., Caldwell, L. L., Graham, J. W., & Ridenour, T. A. (2006). Individual motivation and parental influence on adolescents' experiences of interest in free time: A longitudinal examination. *Journal of Youth and Adolescence, 35*, 340-353.
- SOS Outreach. (Unpublished). Inspiring youth to make positive decisions for healthy and successful lives. Vail, CO: Kirsten Texler & Caitlin Kincaid.

Ullrich-French, S., & McDonough, M. H. (2013). Correlates of long-term participation in a physical activity-based positive youth development program for low-income youth: Sustained involvement and psychosocial outcomes. *Journal Of Adolescence*, *36*, 279-288. doi:10.1016/j.adolescence.2012.11.006

Weiss, H. B., Little, P., & Bouffard, S. M. (2005). More than just being there: Balancing the participation equation. *New Directions for Youth Development*, *2005*, 15-31.