

BROCK UNIVERSITY LIBRARY



3 9157 00834595 4

W. August

**The Role of Motivational Systems in Community Service Involvement: Initiating
and Sustaining Factors and Quality of Experience**

by

Holly L. Stack

A thesis
submitted in partial fulfillment
of the requirements for the degree
Master of Arts

Department of Psychology
BROCK UNIVERSITY
St. Catharines, ON

November, 2005

© Holly Stack, 2005

**JAMES A GIBSON LIBRARY
BROCK UNIVERSITY
ST. CATHARINES ON**

Abstract

Community service participation can have a positive impact on development, especially for youth. Although researchers have found positive outcomes, there has been a notable decline in youth participation over the past few years (Statistics Canada, 2000). Given the positive outcomes and current decline, it has been argued that youth should be encouraged to get involved in service activities. In the present study, quantitative and qualitative data were collected to determine factors that would help youth to initiate and sustain service, along with examining the quality of their experience. Eighty-two university undergraduate students (23 men), ranging in age from 17-20 years completed a 60-minute self-report questionnaire. Initiating and sustaining factors, motivational systems (similar to approach and avoidance dimensions), activity dimensions (*Structure*, *Supportive Social Environment*), quality of experience (*Positive*, *Stress-Challenge*), and future intention to participate in community service were measured. Eight participants also completed a 20-minute telephone interview to complement and expand on the quantitative data collected.

Some initiating and sustaining factors were specific to individuals higher on the avoidance dimension, while others were relevant to those higher on the approach dimension. Several factors also were important to individuals regardless of their motivational system orientation. Positive quality of experience was related positively to experiencing a supportive social environment. In addition, women rated their community service as more positive than did men. A predicted interaction between the avoidance dimension and *Structure* in predicting positive quality of experience was not supported; however, positive quality of experience was predicted by the interaction of the approach

dimension and *Structure*. A tested interaction between the avoidance dimension and *Supportive Social Environment* in predicting positive quality of experience was not supported. Similarly, a predicted interaction between the approach dimension and *Supportive Social Environment* in predicting positive experience quality was not supported. However, *Supportive Social Environment* was positively related to positive quality of experience. No support was found for a mediational role for positive quality of experience or stress-challenge quality of experience in exploring the relation between motivational orientation and future intention to engage in service activities.

The results of this study suggest that participating in a service environment that is supportive and provides the opportunity for social interactions with others would promote positive quality of experience and help youth sustain involvement. Thus, to help youth have positive experiences and to remain active in service, it is important for service agencies to promote these types of environments. In addition, some initiating and sustaining factors were specific to youth higher on the avoidance dimension and some were relevant to youth higher on the approach dimension. Therefore, service agencies may need to consider using different recruitment and retention strategies, depending on the type of youth they wish to recruit.

Acknowledgements

Many people provided support and guidance throughout the time my thesis was prepared. First, I would like to express gratitude to my thesis advisor Dr. Linda Rose-Krasnor who guided me through the many stages toward the completion of my thesis. I would also like to thank my committee, Drs. Carolyn Hafer and Teena Willoughby, along with my external examiner, Dr. Michael Pratt, for providing valuable suggestions.

Moreover, I would like to thank the Centre of Excellence for Youth Engagement and Health Canada for providing funding for this project. Also, I would like to thank the participants who were involved in this study. I couldn't have done it without you!

I cannot say thank you enough to researchers Jen Evans, Michael Busseri, and Michelle Green for providing me with all of their assistance. Jen, co-researcher of the study, helped recruit participants and aided in data entry; Michael was available to answer questions and provide advice; and Michelle meticulously coded qualitative data.

Finally, I would like to thank my friends and family for providing me with support and encouragement throughout this journey. In particular, Kelly, Richard, Julie, and Hilary for being there when I needed them; Marcus, for helping me to believe in myself and for his patience; my parents for supporting me throughout my schooling and encouraging me to "follow my dream"; and aunt Bernie for keeping things interesting.

I would like to dedicate this thesis to two individuals who contributed an enormous amount of time and effort toward community service: my grandfather, Bob Taylor, and my aunt, Kim Taylor, who both passed away during the two years I spent completing my thesis. You were both inspirations to me and your selfless ways to help better the community will always be remembered.

Table of Contents

Abstract.....	2
Acknowledgments	4
Table of Contents.....	5
List of Tables	8
List of Figures.....	9
List of Appendices	10
Introduction.....	11
What is Community Service and Who is Participating?	11
Multiple Levels of Analysis	14
Why is Community Service Important?.....	15
Positive Outcomes at the System Level	15
Positive Outcomes at the Social Level	16
Positive Outcomes at the Individual Level.....	16
Initiating and Sustaining Factors of Community Service.....	17
System Level Initiating and Sustaining Factors	18
Social Level Initiating and Sustaining Factors	19
Individual Level Initiating and Sustaining Factors.....	20
Motivational systems.....	22
General predispositions and their role as potential individual level factors	22
Two general constructs: Approach and avoidance.....	22
Initiating and sustaining community service: the relevance of the constructs of approach and avoidance	25
Experiences within Community Service Activities.....	29
Quality of Experience.....	29
Activity Dimensions of Community Service.....	30
Structure.....	31
Social Interaction.....	32
Feedback	34
Future Intention to Participate in Community Service	35
Summary of Hypotheses	36
Method.....	38
Procedure	38
Recruitment.....	38
Phase One: The Survey.....	39
Phase Two: The Interview	40
Participants.....	40
Measures	41
Demographic Information	41
Motivational Systems.....	44
Community Service Involvement.....	45
Initiating and Sustaining Factors	46
Activity Dimensions.....	46
Quality of Experience.....	49

Future Intention to Participate in Community Service	51
Interview Schedule.....	52
Triangulation.....	54
Negative Cases	55
Transferability.....	55
Confirmability.....	56
Qualitative Data Analysis Procedures	56
Results	58
Data Screening.....	58
Missing Data	58
Distributions.....	58
Correlations Between Variables.....	60
Hypothesis One: BIS/BAS and Initiating and Sustaining Items.....	62
Initiating Factors	63
Initiating Factors Important to BIS.....	65
Initiating Factors Important for BAS.....	68
Initiating Factors Important for BIS and BAS Combined	69
Sustaining Factors	70
Sustaining Factors Important for BIS.....	72
Sustaining Factors Important for BAS	73
Sustaining Factors Important for BIS and BAS Combined	74
Suggestions for Initiating Involvement	76
Hypothesis Two: Motivational Systems and Activity Dimensions Predicting	
Quality of Experience	80
BIS by Structure Predicting Positive QE.....	80
BAS by Structure Predicting Positive QE	82
BIS and Supportive Social Environment Predicting Positive QE.....	84
BAS and Supportive Social Environment Predicting Positive QE	86
Quality of Experience Descriptions.....	87
Positive Qualities of Experience Descriptions.....	88
Fun.....	88
Good At.....	90
Rewarding	92
Influence.....	94
Stress-Challenge Qualities of Experience Descriptions.....	96
Stressful.....	96
Challenging	99
Hypothesis Three: Stress-Challenge QE as a Mediator Between BIS and Future	
Service Intention	102
Hypothesis Four: Positive QE as a Mediator Between BAS and Future Service	
Intention	103
Discussion.....	106
Motivational Systems and their Relation to Initiating and Sustaining Factors ...	106
Initiating Factors and Suggestions for Community Service Involvement.....	107
Peer and Parent Community Service Involvement	107
Believing in a Cause.....	108

Options in the Community.....	109
Expectations of Enjoyment.....	109
Using Skills and Knowledge	110
Familiar/Comfortable Environment.....	110
Meet Others	110
Persistence	111
Try a Variety of Activities	111
Sustaining Factors for Community Service Involvement	111
Social Support from Family, Friends, and Community Service	
Others	112
Acknowledgements from Others	112
Enjoyment of Working Toward Goals.....	114
Making a Difference.....	114
Comfort Level of Participation	115
Social Interactions with Community Service Others	116
Positive Experiences.....	117
Positive Qualities of Experience	117
Motivational System-Activity Dimension Match.....	118
Stress Challenge Qualities of Experience.....	120
Methodological Considerations.....	120
Self-Selected Sample.....	120
Direction of Causality	122
Method of Measurement	122
Multiple Levels of Analysis.....	122
Questionnaire.....	122
Interview Schedule	124
Future Research.....	126
Age Differences.....	126
Sex Differences	127
BIS/BAS.....	128
Summary of Findings.....	128
General Conclusions	130
References.....	132
Appendices.....	140

LIST OF TABLES

TABLES	PAGE
1. Demographic Characteristics of Participants.....	42
2. Summary of Measures.....	43
3. EFA Pattern Matrix Loadings for 12 Activity Dimension Items.....	49
4. EFA Pattern Matrix Loadings for 9 Quality of Experience Items.....	51
5. Skewness and Kurtosis Values.....	59
6. Zero-order Correlations and Partial Correlations (Controlling for Participant Sex).....	61
7. Means, Standard Deviations, and Partial Correlations Between Motivational Systems and Initiating and Sustaining Items.....	64
8. A Summary of Factors Relevant to Initiating and Sustaining Community Service.....	66
9. Hierarchical Multiple Regression Analysis Predicting Positive Quality of Experience From Structure by Motivational System Interaction	81
10. Hierarchical Multiple Regression Analysis Predicting Positive Quality of Experience From Supportive Social Environment by Motivational System Interaction	85
11. Hierarchical Multiple Regression Analysis Predicting Stress-Challenge Quality of Experience From BIS	103
12. Hierarchical Multiple Regression Analyses Predicting Positive Quality of Experience and Future Intention From BAS	104

LIST OF FIGURES

FIGURES	PAGE
1. BAS by Structure Interaction Predicting Positive QE.....	83

LIST OF APPENDICES

APPENDIX	PAGE
A. Brock University Ethics Approval	140
B. Community Service Questionnaire Measures and Interview Script	142
C. Motivational Systems Qualitative Classification.....	150
D. Confidentiality Form.....	153

INTRODUCTION

What is Community Service and Who is Participating?

Voluntarily donating one's time towards community service has been a valued component of citizenship for many years. Volunteerism involves "people choosing to help others in need by actively seeking out acts that are sustained over extended periods of time" (Omoto & Snyder, 2002, p. 847). Volunteering is relatively long-term, involves thoughtful and planned action, usually consists of nonobligatory helping, and often occurs in an organization (Penner, 2002). A community service definition, directed toward youth, "implies involvement in helping others when youth could otherwise act primarily for their own satisfaction" (Youniss & Yates, 1997, p. 5). A key component of these definitions is that service is done on a voluntary basis. Not all community service, however, is voluntary. Mandatory community service is performed to complete a requirement (secondary school graduation, a course requirement, etc.). Although mandatory service is not considered voluntary helping, it can, however, still be a planned action involving choice of where and to whom to devote helping behaviour. In recent years, both voluntary and mandatory community service have been encouraged by youth institutions to promote service participation.

As reported by their administrators, youth groups and organizations such as 4-H Ontario (S. Lennox, personal communication, July 22, 2004), Girl Guides of Canada (C. Ryan, personal communication, July 22, 2004), and Cadets Canada (I. Lambert, personal communication, July 26, 2004) encourage community service participation and incorporate service activities into many aspects of their programs. Many schools and church youth groups also promote, and sometimes require, community service. For

example, in the United States, service-learning programs are often implemented by schools and support community service participation in combination with educational objectives (Bringle, 2005). Within the past several years, secondary schools in Ontario and British Columbia have required youth to become involved in community service activities. In Ontario, youth who have entered Grade 9 since 1999-2000 must complete 40 hours of community service to graduate from secondary school (Ministry of Education and Training, 1999). Similarly, in British Columbia, students are required to complete a 30-hour work experience program, which includes an option of completing 30 hours of community service as a fulfillment of this requirement (British Columbia Ministry of Education, 2005). It is quite possible, then, that many youth may participate in both voluntary and mandatory community service activities.

According to the National Survey of Giving, Volunteering and Participating (NSGVP), 27% of Canadians aged 15 years and over participated in community service within the one-year span of the survey (Statistics Canada, 2000). It was reported that youth 15-24 years of age and individuals 35-44 years of age participated in community service at a higher rate (29% and 30% respectively) than individuals in any other age group. The implementation of the community service mandate in Ontario secondary schools will most likely increase the participation rate within the youth age group. At present, of the 7% of individuals who stated that they were required to participate in community service, 35% were individuals 15-24 years of age (Statistics Canada, 2000). With community service participation slowly being implemented via secondary schools and post-secondary institutions, an increase in overall participation of individuals ages 19 and under is likely to be reported in the near future.

Community service participation has been found to increase with age (Janoski & Wilson, 1995; Janoski, Musick, & Wilson, 1998; Statistics Canada, 2000). This phenomenon may be a reason why research on service participation has had a greater focus on adult motivations, experiences, and benefits of involvement than on youth participation (Okun & Schultz, 2003; Omoto & Snyder, 1995; Penner & Finkelstein, 1998; Thoits & Hewitt, 2001). More recently, however, research also has been directed toward youth participation and the importance of becoming involved before adulthood (Foster & Meinhard, 2000; Janoski, et al., 1998; Karniol, Grosz, & Schorr, 2003; Miller, 1994; Pancer & Pratt, 1999; Primavera, 1999; Stukas, et al., 1999; Stukas, Snyder, & Clary, 1999; Yates & Youniss, 1996, 1997).

It is important to research youths' community service participation and experiences because adolescence is a time for exploration of roles, establishing personal boundaries, and forging an identity that is separate from parents. Erikson's (1968) fifth and sixth developmental stages of "identity versus identity confusion" and "intimacy versus isolation" emphasize the need to try out roles in order for youth to examine who they are and where they fit into society, along with the importance for youth to develop relationships outside the family unit. Similarly, Flanagan, Gill, and Gallay (2005) describe the importance of exposure to interest-based activities in helping youth consolidate identity by investigating avenues for self-exploration during these formative years. Thus, it is important that youths' community service participation be examined separately from adult participation. This differentiation may give us new insights into the factors that help to initiate and sustain community service participation, along with the experiences that youth are having while participating in these activities. Multiple levels

of analysis will be used to illustrate the importance of community service and the positive outcomes related to service participation, along with providing a framework to introduce initiating and sustaining factors of community service.

Multiple Levels of Analysis

In the present study, a framework consisting of multiple levels of analysis will be used to outline the potential positive outcomes and individual differences in youths' community service participation. These levels of analysis include the system, the social, and the individual levels (Busseri, Campbell, Pancer, & Rose-Krasnor, 2003). Each of these levels contain initiating, sustaining, and outcome factors.

The system level includes local organizations, along with structures beyond those in the local community, such as the government and organizations that fund community service programs. These governing bodies may determine the community service opportunities available in the youth's community, along with having a direct influence on the decision to participate (e.g., community service mandates). This level also includes the impact that an individual's service participation may have on the community (e.g., contributing to the development of a larger pool of accessible community service participants).

The social level includes others who interact with the individual, such as friends, family, and peers. This level also includes the relationships that youth may develop with others involved in the helping process (e.g., people who work for or contribute their time to service activities, and recipients of services).

Finally, the individual level encompasses factors within the individual that directly affect or are affected by the individual's participation in an activity such as

personal benefits gained from community service participation, motivations expressed for initiating service, and individual reasons for continuing service.

Why is Community Service Important?

Prior to inquiring about youths' experiences in service activities or why they may become involved in the first place, it is imperative to understand the importance of community service for those involved. Participating in service may provide youth with an assortment of experiences and opportunities that contribute to their communities, build relationships with others, and enhance personal factors.

Positive Outcomes at the System Level

Little research has focused on the impact that youth community service has on system-level factors. One community organization reported that the expansion of their volunteer pool was beneficial for the services that they provided (Miller et al., 2002). Therefore, as the number of individuals participating in community service increases, it can be assumed that a greater number of non-profit organizations are able to provide more extensive services to those they serve. In addition, community action involving positive changes in the community (e.g., the reopening of a park) has been reported as an outcome of service participation (Pancer & Cameron, 1994). Furthermore, upon examination of non-community and community service activities, it was found that both types of involvement may provide youth with opportunities for community integration and positive involvement attitudes. However, community service activities may have a unique role in developing positive perceptions of adult-youth partnerships (Stack, Rose-Krasnor, Busseri, & Campbell, 2005).

Positive Outcomes at the Social Level

At the social level, numerous positive outcomes may be experienced, such as building relationships with others. Through community service participation, youth may be given the opportunity to interact with others who are different in some way from themselves (e.g., education level, cultural background, age) and, in normal circumstances, with whom they may not have interacted (Miller et al., 2002; Primavera, 1999). Interacting and sharing experiences with others who are different than the youth allows him or her to develop a more open mind and gives the youth an opportunity to appreciate diversity, recognize the similarities among others, and challenge negative stereotypes (Primavera, 1999; Yates, 1999; Youniss & Yates, 1997). During community service participation, youth also are exposed to important issues such as poverty, illiteracy or community violence (Primavera, 1999). This exposure has been found to help youth experience how others live and has been related to a greater understanding of others' life circumstances (Middleton & Kelly, 1996).

Positive Outcomes at the Individual Level

Finally, at the individual level, community service participation has been related to the development and enhancement of self-factors and skills. Youths' reports include learning valuable things about one's self such as qualities that one may possess or gaining an outlook on future career choices (Pancer & Pratt, 1999; Primavera, 1999). Increased self-esteem, self-confidence, and self-discovery also have been related to helping others (Hamilton & Fenzel, 1988; Middleton & Kelly, 1996; Pancer & Cameron, 1994; Primavera, 1999). Outcomes relating to the development of skills include enhanced problem-solving skills, in addition to learning to adapt to situations (Miller et al., 2002).

Community service participation also has been shown to aid youth identity development. For example, it was found that youth who participated in service incorporated their own opinions of experiences with their classmates' opinions, thus challenging their own beliefs about social issues and service recipients (Youniss & Yates, 1997). Moreover, exposure to other individuals participating in moral and political behaviours enables youth to integrate others' beliefs and actions with their own sense of self, thus creating a stronger personal and collective identity (Flanagan et al., 2005; Yates & Youniss, 1996, 1997; Youniss, McLellan, & Yates, 1997).

Furthermore, even after controlling for selection factors, youths' community service participation has been associated with an increase in community involvement beliefs (Johnson, Beebe, Mortimer, & Snyder, 1998). That is, participation in service promoted a connection with, and a possible investment in, the future community (Pancer & Cameron, 1994). Youth involved in the community may become more concerned than before participation with the social and altruistic rewards that transpire from participation. Moreover, these youth may place greater worth on contributing to the community than those who are not involved in their community (Johnson et al., 1998).

It is evident that participation in community service may provide youth with numerous positive outcomes at all three levels of analysis, in addition to contributing positively to the community. In order to increase youth participation rates, it is important to understand the potential factors that may be influential in helping them to become involved and to remain in these community service activities.

Initiating and Sustaining Factors of Community Service

Many factors can lead youth to decide to participate in activities in general and,

more specifically to this study, to community service in particular. These are referred to as initiating factors (Pancer & Pratt, 1999). Furthermore, there are also factors that may be responsible for helping keep youth involved in participation. These are referred to as sustaining factors (Pancer & Pratt, 1999).

System Level Initiating and Sustaining Factors

Initiating and/or sustaining factors at the system level include youths' government, the neighbourhood in which youth live, and the tasks expected of youth within their community service activity. Each of these factors will be discussed in turn.

An example of a government factor that may influence youths' decisions to participate in service is a legislated mandate for service participation. As mentioned previously, the Ontario government has implemented a mandate for community service participation in secondary schools as a partial requirement for graduation (Ministry of Education and Training, 1999). The decision to participate is essentially made for the students, which may ultimately influence the activity-related experiences and the youth's decision to continue participation once the requirement is fulfilled.

Youths' neighbourhood also may influence their decision to get involved in service. That is, are opportunities to participate in service activities available in the youths' neighbourhood and/or community? It can be assumed that youth would be more likely to participate in service if a selection of activities was offered in their neighbourhoods. However, if these opportunities are lacking, youth may not be able to select an activity in which they are interested and/or suited and thus would either have to become involved in an activity that they do not enjoy or may not become involved at all.

A factor found to be important to youth in sustaining community service

participation is the variety of tasks and responsibilities that are given to the youth in service organizations (Foster & Meinhard, 2000). For example, in the framework of flow theory, youth need activities in which both challenges and skill level are high so that boredom does not result (Csikszentmihalyi & LeFevre, 1989). Csikszentmihalyi and LeFevre stated, “When both challenges and skills are high, the person is not only enjoying the moment, but is also stretching his or her capabilities with the likelihood of learning new skills and increasing self-esteem and personal complexity” (p. 816). Thus, it is important that youth be provided with tasks that will both maintain their attention and allow them to use and extend their skills in order to promote sustained participation.

Social Level Initiating and Sustaining Factors

Important initiating and sustaining factors at the social level include the involvement of youths’ parents and/or peers in community service. Parents and peers help youth become involved in service and promote the continuation of service (da Silva, Sanson, Smart, & Toumbourou, 2004; Janoski & Wilson, 1995; McLellan & Youniss, 2003; Pancer & Pratt, 1999).

McLellan and Youniss (2003) found that, when parents participated in community service, youth were twice as likely to become involved as when parents did not participate. Several reasons for this outcome have been proposed, including the values that parents hold for service participation, the encouragement that they provide for their children to become involved, and the socialization of prosocial attitudes within the family (da Silva et al., 2004; Janoski & Wilson, 1995; Pancer & Pratt, 1999; Schondel & Boehm, 2000). In addition to helping youth become involved in community service, parental involvement in service and having a supportive family network that encourages

and supports service participation also have been reported as sustaining factors (Pancer & Pratt, 1999). For example, in one study, youth who had “parental helping models” (i.e., parents involved in community service) reported that they were more likely to intend to participate in service in the future than youth who did not have parents involved in service (Stukas et al., 1999).

Peers, as well as parents, are influential in motivating youth to participate in community service. Youth are more likely than any other age group to report that the reason they became involved in service was because their friends were involved (Statistics Canada, 2000). This is evident in a study conducted by McLellan and Youniss (2003) in which it was found that youth who had service-involved friends were three times as likely to participate than youth whose friends did not do any community service. Similarly, da Silva et al. (2004) found that peer encouragement and participation predicted higher levels of community civic responsibility in youth exposed to these peer influences than in youth who did not receive this positive peer exposure. Furthermore, peers can also help youth to stay involved in community service. For example, youth reported that having a supportive social network and having friends who also participated in community service helped them to stay involved themselves (Pancer & Pratt, 1999).

Individual Level Initiating and Sustaining Factors

Initiating factors at the individual level include youths’ beliefs about the cause supported by the community service activity, expectations of the service activity, interests, and motivational systems. Each factor will be discussed in turn; however, my concentration will be on individual differences in motivational systems and how these systems may be important in initiating and sustaining community service. The

importance of studying motivational systems in relation to community service and relevant research on the dimensions central to these systems will be discussed.

In a recent survey, a major reason that youth gave for participating in community service was that they were able to help a cause in which they believed (Statistics Canada, 2000). Pancer and Pratt (1999) also found that youths' beliefs (i.e., religious, personal, and moral) were important in initiating service participation.

In addition, youths' expectations of the community service activity also may influence their decision to become involved. For example, youth who expect to enjoy an activity may be more likely to participate than those who do not hold positive expectations.

Moreover, Pancer and Pratt (1999) found that youth reported initiating service because they were interested in the type of activity or tasks in which they would be participating. Also, having the opportunity to explore personal strengths was reported as an important reason youth became involved in community service (Statistics Canada, 2000).

Sustaining factors at the individual level include youths' level of comfort in performing the activity, their ability and desire to work toward goals, feelings of "making a difference", and the opportunity to learn (e.g., a new skill, more about oneself; Foster & Meinhard, 2000; Pancer & Pratt, 1999). Specifically, individuals participating in service who feel that they have contributed to the service and made a difference to the recipients are more likely to continue participating than those individuals who do not report those feelings (Foster & Meinhard, 2000; Primavera, 1999).

Motivational systems

General predispositions and their role as potential individual level factors.

Individuals possess general predispositions that influence both their interactions with others and their reactions to the environment. These predispositions have been classified as temperament dimensions (Rothbart & Bates, 1998; Shiner & Caspi, 2003), personality traits (Eysenck, 1967; McCrae et al., 2000) and motivational systems (Carver & White, 1994; Gray, 1972). In addition, research in the area of motivational systems, as introduced by Gray (1972), emphasizes cognitive, behavioural, affective, and social components that are similar to those found in temperament and personality research (Rothbart & Bates, 1998; Shiner & Caspi, 2003). In the following section, the dimensions of approach/reward seeking and avoidance/withdrawal will be discussed. These dimensions have been researched and discussed in relation to temperament dimensions (Buss & Plomin, 1984; Rothbart & Bates, 1998; Thomas & Chess, as cited in Goldsmith, 1987), models of personality (Elliot & Thrash, 2002; McCrae & John, 1991), and motivational systems (Carver & White, 1994; Elliot, 1999; Elliot & Covington, 2001; Gray, 1972, 1987). Furthermore, approach and avoidance dimensions are thought to encompass most aspects of human behaviour (Carver, Sutton, & Scheier, 2000) and in the present study are contemplated to be important for community service participation. First, general systems of approach and avoidance will be discussed, followed by a detailed explanation of the relevance of these systems to community service participation.

Two general constructs: Approach and avoidance. The dimensions of approach and avoidance, viewed as “classes of motives or actions”, have been referred to as “the basic building blocks that underlie the complexity of human behaviour” (Carver et al.,

2000, p. 741). These motives are thought to be involved in the selection of pathways individuals choose when performing a multitude of activities.

Gray (1972) developed a theory that involved two motivational systems similar to approach and avoidance: the appetitive and aversive systems. The appetitive motivational system, as defined by Gray (1972), is called the behavioural activation system (BAS) and although the neural basis is not exactly certain, it is believed that dopaminergic pathways play a role (Stellar & Stellar, 1985). This system is sensitive to signals of environmental reward, nonpunishment, and escape from punishment (Carver & White, 1994). This system, similar to the approach dimension, causes a person to move toward goals and is responsible for positive feelings, such as hope, elation, and happiness, as an individual comes closer to reaching a goal.

Approach dimensions of temperament, such as BAS, are related to adult dimensions of extraversion or positive emotionality (Ahadi & Rothbart, 1994; Elliot & Thrash, 2002; Gomez & Gomez, 2002; Klein, 1987; Rothbart et al., 2000). Similar to BAS, characteristics of extraversion are reward-oriented, active, outgoing, and seeking stimulation or novelty (McCrae & John, 1991; Rothbart & Bates, 1998). These forms of extraversion have been correlated with higher BAS scores (Carver & White, 1994; Caseras, Avila & Torrubia, 2003; Elliot & Thrash, 2002; Jorm et al., 1999), such that individuals higher on BAS are more likely to score higher on extraversion than their lower BAS counterparts. Other dimensions that are positively correlated with BAS scores include sociability (Carver, 2004), activity (Carver, 2004), impulsivity (Carver, 2004; Caseras et al., 2003), positive affectivity (Carver & White, 1994; Gable, Reis & Elliot, 2000; Jorm et al., 1999), positive temperament (Carver & White, 1994), novelty seeking

(Caseras et al., 2003), and sensitivity to reward (Carver & White, 1994; Caseras et al., 2003).

In summary, individuals higher in BAS are more likely to be characterized as extraverted, sociable, and active than individuals lower in BAS. In addition, individuals higher in BAS are more likely to report positive affect than their lower BAS counterparts.

The second system identified by Gray (1972) is the aversive motivational system. It is called the behavioural inhibition system (BIS) and is located in the areas of the frontal cortex, the medial septal area, and the hippocampus. This system is sensitive to signals of punishment, nonreward, and novelty (Carver & White, 1994). This system, similar to the avoidance dimension, is responsible for the experience of negative feelings of fear, anxiety, frustration, and sadness (Carver & White, 1994; Gray, 1972). Therefore, an individual who is higher in BIS sensitivity is more prone to feelings of anxiety and nervousness than someone who is low on this factor. This system causes inhibition of movement toward goals (Carver & White, 1994).

Avoidance dimensions of temperament, such as BIS, are related to adult dimensions of neuroticism (Elliot & Thrash, 2002; Rothbart et al., 2000) and negative emotionality (Ahadi & Rothbart, 1994; Elliot & Thrash, 2002; Gomez & Gomez, 2002; Klein, 1987). More specifically, the personality trait of neuroticism, characterized by feelings of frustration, guilt, and tension (McCrae & John, 1991), has been correlated with higher BIS scores (Carver, 2004; Carver & White, 1994; Elliot & Thrash, 2002; Gable et al., 2000; Jorm et al., 1999). BIS scores also have been positively correlated with nervousness (Carver, 2004), anxiety (Jorm et al., 1999), depression (Jorm et al., 1999), negative temperament (Carver & White, 1999), susceptibility to punishment

(Carver & White, 1994; Caseras et al., 2003), and harm avoidance (Carver & White, 1994; Caseras et al., 2003). Moreover, BIS has been associated with the personality trait of introversion (Gray, 1972).

In summary, individuals who are higher in BIS are more likely to be characterized as nervous and anxious than individuals lower in BIS. In addition, individuals higher in BIS are more likely to display negative affect than their lower BIS counterparts. In the present study, I thought that these motivational systems may be important to study in the context of community service.

Aside from personality traits and affect, approach and avoidance motivations have often been studied in relation to goal achievement (Elliot, 1999; Elliot & Thrash, 2001). In approach motivation, behaviour is directed by a positive possibility (i.e., to achieve a goal), whereas in avoidance motivation, behaviour is directed by a negative possibility (i.e., to avoid punishment; Elliot, 1999). These goal-related mechanisms, evident in Gray's (1972) motivational systems theory, are important to consider when examining the factors that help someone both to become and stay involved in community service.

Initiating and sustaining community service: the relevance of the constructs of approach and avoidance. According to Buss and Plomin (1984), it is possible that individuals select their environments according to their temperament. For example, "an active person gravitates toward fast-paced or high-energy situations, a sociable person selects activities with people, and an emotional person tends to avoid situations involving stress" (Goldsmith et al., 1987, p. 520). Similarly, Buss (1987) acknowledged that temperament would influence both the situations individuals choose to enter and their level of comfort in different conditions. Along these lines, whether youth become and

remain involved in activities or not is likely to be related to the level of each motivational system that they possess. That is, some individuals may be more likely to enter into new activities and find certain aspects highly motivating, therefore becoming both involved in and remaining in these activities to reach their goals. However, others may be more likely to hold back and observe or avoid certain situations altogether, therefore hindering goal pursuit (Elliot, 1999; Rothbart & Bates, 1998). In the present study, I proposed that motivational systems may be associated with youths' involvement in community service. Specifically, the question **“Do people with higher BIS scores differ from people with higher BAS scores on initiating and sustaining factors with respect to community service activities?”** was examined. Few studies have examined temperament dimensions in relation to community service participation; thus, these studies will be discussed in detail.

Approach and avoidance temperament dimensions have been researched in relation to general involvement in activities. Klein (1987) studied the relationship between college activity involvement and temperament by assessing the dimension of approach-withdrawal, along with activity level-general, activity level-sleep, flexibility-rigidity, attention span-distractibility, mood, and rhythmicity. Using stepwise regression analysis, Klein demonstrated that the approach/withdrawal dimension best predicted involvement in college activities (e.g., athletics, social, religious) for first-year college youth (17-19 years of age). Youth higher on the approach dimension also were high on college activity involvement, whereas youth lower on approach were less involved in activities. Furthermore, youths' satisfaction with their activity involvement was measured. Similar to the findings for activity involvement, the approach/withdrawal

dimension best predicted satisfaction in college activities, such that youth higher on the approach dimension were more likely to be highly satisfied with their involvement than youth lower on approach. In sum, youth higher on approach were more involved in college activities and were more satisfied with their involvement than their low-approach counterparts.

Research on temperament and its potential specific influence on community service participation is sparse. da Silva et al. (2004) and Carlo, Roesch, and Melby (1998), however, did examine temperament dimensions in relation to community involvement. da Silva et al. used the coping-competency model, which proposed that youth with high activity levels who tend to approach new situations, along with having higher self-esteem and greater problem solving abilities, may be more likely to feel comfortable engaging in civically responsible activities, resulting in higher levels of civic responsibility. The temperament dimensions of activity, persistence, and approach/withdrawal were used to predict civic responsibility, defined as “positive attitudes and behaviours that are voluntary and aimed at helping others” (Eisenberg, 1982 as cited in da Silva et al., 2004, p. 231), among youth (15-16 and 16-17 years of age). A hierarchical multiple regression was conducted to test the proposed hypothesis using six predictor variables: social information processing; coping strategies; self-esteem strengths; self-concept; social skills; and temperament. The three temperament dimensions did not add any variance to the model, over and above the other five variables, when predicting community civic responsibility. However, the results of this study must be viewed with caution because 76.5% of the youth reported that they had never participated in community service activities and overall interest in service was low.

Therefore, the importance of the temperament dimensions for service may not have been detected because so few youth had experiences relating to the criterion.

In an additional study related to the approach dimension, Carlo et al. (1998) examined youths' (12.6 to 15.8 years of age) sociability temperament. In this exploratory study, sociability temperament and parental support were used as predictor variables in predicting youths' prosocial behaviours. Based on the literature, it would be expected that youth would be more likely to engage in prosocial behaviours when high maternal support was present than when youth did not receive this support (da Silva et al., 2004; Janoski & Wilson, 1995; Schondel & Boehm, 2000). However, results showed an interaction, in which high maternal support, in combination with low levels of sociability in youth, were related to low frequency (rather than high frequency) of prosocial behaviours. It seems that, in this study, although low-sociable youth received high maternal support, they still did not approach opportunities for prosocial behaviour.

In summary, by definition, motivational systems influence whether an individual approaches situations or tends to avoid them. At present, the area of motivational systems and how they pertain to individuals' activity involvement has received little (if any) empirical attention. However, it is possible that individuals high and low on BIS and BAS dimensions differ in their initiation and maintenance of service activities. In the remainder of this paper, I will focus on how these motivational systems, in conjunction with characteristics of community service activities, may relate to the quality of the community service experience and youths' intentions to participate in future community service.

Experiences within Community Service Activities

Individuals higher and lower on the BIS/BAS dimensions may have different experiences within activities, relating to the quality of experience, compared to their counterparts. When individuals' characteristics, such as motivational systems, and the environment are compatible it can be expected that youths' perceived quality of experience in a community service activity will be higher than youth who do not experience this match. Therefore, I hypothesized that quality of experience will be predicted by an interaction between individuals' motivational systems scores and activity dimensions. I will outline the quality of experience and activity dimension components of this hypothesis below.

Quality of Experience

Following the model proposed by Omoto and Snyder (1990), youths' experiences in their community service activities will be examined. To evaluate volunteer satisfaction, Omoto and Snyder (1995) used volunteer ratings of community service experience which contained both positive qualities (i.e., satisfying, rewarding, exciting, interesting, important, enjoyable) and a challenge dimension (i.e., disappointing, challenging, boring). Similar to Omoto and Snyder's (1995) dimensions, the dimensions used in the present study also contained positive qualities (i.e., fun, competency, rewarding, important to self and society, difficulty giving up, influence) and a stress-challenge dimension (i.e., stressful, challenging), adapted from the Centre of Excellence for Youth Engagement's "Activity Matrix" (Busseri & Rose-Krasnor, submitted).

To complement the quality of experience quantitative data, both positive and stress-challenge qualities of experience also were examined qualitatively. The purpose of

these data was to develop further the understanding of quality of experience and answer the research question, **How are community service activities experienced by youth?** Youth were given the opportunity to describe aspects within their service activities, which reflected selected qualities of experience. Hypotheses involving the above qualities of experience are proposed in relation to specific activity dimensions as discussed below.

Activity Dimensions of Community Service

As has been found in much of the research on community service participation, service activities are not all equal (Metz et al., 2003). For example, activities may differ on aspects such as the time commitment expected (e.g., once a week vs. a one-time involvement) or the kinds of recipients being helped. In the present study, I was interested in examining specific dimensions present within service activities. Specifically, I wanted to determine whether certain activity dimensions are associated with youths' quality of community service experience. However, based on youths' motivational system orientations it is likely that they will respond differently to dimensions of the service activity. Therefore, examining activity dimensions in combination with motivational systems was thought to be important when predicting quality of service experience. The importance of this person-environment match and the hypotheses proposed will be discussed below.

As previously discussed, certain types of individuals may excel in particular kinds of environments (Elliot, 1999; Rothbart & Bates, 1998). In the vocational literature, organizations attempt to form a match between a potential employee's interests and the characteristics of his or her chosen occupation, known as a "person-environment fit" (e.g., Chartrand, 1991; Gati, 1998). The effectiveness of this congruence is thought to be

related to employee job satisfaction and well-being (Gati, 1998). Similarly, Buss and Plomin (1984) also refer to the importance of a fit between individuals and their environments in promoting optimal experiences. This “goodness of fit” relates to an individual’s temperament dimensions, rather than personal interests as in the vocational literature, and the characteristics of the environment. Clary and Snyder (1999) conducted research emphasizing the importance of this “fit” for individuals involved in community service. The concept of a “matching hypothesis” was developed, in which decisions and behaviours were found to be dependent on the match between an individual’s motivations to initiate service involvement and the opportunities available that corresponded to these motivations. A similar concept was proposed in the present study. That is, a match between the youth’s motivational systems and the community service activity’s dimensions was thought to be important in predicting the quality of experience encountered by the youth (e.g., positive, stressful).

To examine the importance of the motivational systems-activity match, activity dimensions were developed to correspond with the BIS/BAS systems. In this study, activities were categorized using the dimensions of structure, social interaction, and feedback. Specific hypotheses will be outlined within the discussion of each activity dimension as follows.

Structure

Community service encompasses a wide range of activities, both structured and unstructured. In past research, structured activities have been defined as follows:

- a) organized by adults and have an adult leader; b) have a system that incorporates constraints, rules and goals, for participation; and c) involve regular meeting times

(Bartko & Eccles, 2003; Larson, 2000; Mahoney, 2000; Mahoney & Stattin, 2000).

Types of organizations in which youth are involved in structured community service activities include arts, social service, and education and research (Statistics Canada, 2000). In contrast, unstructured activities include activities in which the settings are unsupervised and the activities are relatively passive in nature (Bartko & Eccles, 2003).

Examples of unstructured service activities include shopping or driving others to appointments, helping with housework or yard maintenance, unpaid babysitting, and providing care for and visiting the elderly (Statistics Canada, 2000).

The activity dimension of structure is likely to correspond with the BIS characteristic of anxiety experienced due to uncertainty of a situation. That is, individuals higher in BIS may enjoy more structured community service activities because of the higher level of certainty provided. Therefore, **I hypothesized that positive quality of experience would be predicted by an interaction between BIS and the activity dimension *Structure*.** More specifically, it was predicted that a higher score on BIS in combination with a higher score on *Structure* would be associated with the most positive quality of experience.

Social Interaction

Several researchers have attempted to categorize community service activities based on the level of social interaction within the activity (e.g., Johnson et al., 1998; Metz, McLellan, & Youniss, 2003). For example, McLellan and Youniss (2003) categorized community service activities into five groups (social service, working for a cause, teaching/coaching of the needy, teaching/coaching with the non-needy, and functionary work), based on the level of social interaction experienced in the activity.

Social characteristics of service can be described using one or several of the following descriptors: a) exposed to and works with individuals in need such as in homeless shelters or nursing homes; b) often interacts with other individuals such as other volunteers and workers; c) is a place to meet and interact with new people; and d) is a place to perform activities in a team or with others (Metz et al., 2003). Non-social service can be described as not having the opportunity to interact or talk with others while performing the service, not interacting with recipients, and often includes performing activities alone such as administrative tasks (Metz et al., 2003).

It is important to examine social interaction as an activity dimension because of its correspondence to the BIS dimension of sensitivity to novelty and the BAS dimension associated with extroversion. That is, often in a social service activity youth are exposed to unfamiliar others. This unfamiliarity may lead to feelings of anxiety in those who are higher on BIS because of their increased sensitivity to signals of novelty. Therefore, individuals higher on BIS may be more likely to enjoy less social interaction within their community service activities than those lower on BIS.

Therefore, **I hypothesized that positive quality of experience would be predicted by an interaction between BIS and *Social Interaction*. Specifically, it was predicted that a higher score on BIS in combination with a higher score on *Social Interaction* would be associated with lower positive quality of experience.**

As mentioned previously, it has been found that the BAS dimension is related to the extroversion personality trait. Therefore, individuals higher in BAS may be more likely to enjoy a community service activity that has an opportunity for social interaction than individuals lower on BAS. Specifically, **I hypothesized that positive quality of**

experience would be predicted by an interaction between BAS and *Social Interaction*. In particular, it was predicted that a higher score on BAS in combination with a higher score on *Social Interaction* would be associated with higher positive quality of experience.

Feedback

In general, youth have reported that receiving feedback from supervisors in community service organizations is an important aspect of the program (Foster & Meinhard, 2000). The distribution of feedback also has been examined in relation to the dimension of extroversion based on the motivational systems theory (Derryberry & Reed, 1994). Individuals classified as introverts (stronger BIS and weaker BAS) were more likely to maintain attention to negative feedback than extroverts, whereas extroverted individuals (stronger BAS and weaker BIS) were more likely to maintain attention to positive feedback (Derryberry, 1987; Derryberry & Reed, 1994).

It is important to look at feedback as an activity characteristic because of its correspondence with the BIS dimension of sensitivity to punishment and the BAS dimension of sensitivity to reward (Carver & White, 1994). It is possible that youth higher in BIS would be more likely to rate their activity as higher in positive quality of experience if they received little negative feedback than youth lower in BIS. Specifically, **I hypothesized that positive quality of experience would be predicted by an interaction between BIS and negative *Feedback*. Specifically, it was predicted that a higher score on BIS in combination with a higher score on negative *Feedback* would be associated with lower positive quality of experience.**

Furthermore, due to reward orientation, youth higher in BAS may be more likely

to enjoy the activity if they receive greater positive feedback than youth lower in BAS. I hypothesized that positive quality of experience would be predicted by an interaction between BAS and positive *Feedback*. Specifically, it was predicted that a higher score on BAS in combination with a higher score on positive *Feedback* would be associated with higher positive quality of experience.

Future Intention to Participate in Community Service

Finally, I predicted that youths' BIS scores and quality of experience would predict intention to participate in future community service and this relation would be mediated by stress and challenge experienced within the activity. I hypothesized that BIS would predict positively *Stress-Challenge quality of experience*. *Stress-Challenge quality of experience*, in turn, would be correlated negatively with intention to participate in future community service within the next six months. Thus, *Stress-Challenge quality of experience* was predicted to be a mediator between BIS scores and future intention to participate in service.

Additionally, I predicted that youths' BAS scores and quality of experience would predict intention to participate in future community service and this relation would be mediated by positive aspects experienced within the activity. I hypothesized that BAS would be correlated positively with *Positive quality of experience*. *Positive quality of experience*, in turn, would predict positively intention to participate in future community service within the next six months. Thus, *Positive quality of experience* was predicted to be a mediator between BAS scores and future intention to participate.

Summary of Hypotheses

- 1) The question “Do people with higher BIS scores differ from people with higher BAS scores on initiating and sustaining factors relating to community service activities?” was examined.
- 2) I hypothesized that positive quality of experience would be predicted by an interaction between individuals’ motivational systems scores and activity dimensions. The specifics of each part of the hypothesis are as follows:
 - 2a) Positive quality of experience would be predicted by an interaction between BIS and the activity dimension *Structure*. Specifically, a higher score on BIS in combination with a higher score on *Structure* would be associated with the most positive quality of experience.
 - 2b) Positive quality of experience would be predicted by an interaction between BIS and *Social Interaction*. Specifically, a higher score on BIS in combination with a higher score on *Social Interaction* would be associated with lower positive equality of experience.
 - 2c) Positive quality of experience would be predicted by an interaction between BAS and *Social Interaction*. Specifically, a higher score on BAS in combination with a higher score on *Social Interaction* would be associated with higher positive quality of experience.
 - 2d) Positive quality of experience would be predicted by an interaction between BIS and negative *Feedback*. Specifically, a higher score on BIS in combination with a higher score on negative *Feedback* would be associated with lower positive quality of experience.

- 2e) Positive quality of experience would be predicted by an interaction between BAS and positive *Feedback*. Specifically, a higher score on BAS in combination with a higher score on positive *Feedback* would be associated with higher positive quality of experience.
- 3) BIS would predict positively *Stress-Challenge quality of experience*. *Stress-Challenge quality of experience*, in turn, would be correlated negatively with intention to participate in future community service within the next six months. Thus, *Stress-Challenge quality of experience* was predicted to be a mediator between BIS scores and future intention to participate in service.
- 4) BAS would be correlated positively with *Positive quality of experience*. *Positive quality of experience*, in turn, would predict positively intention to participate in future community service within the next six months. *Positive quality of experience* was predicted to be a mediator between BAS scores and future intention to participate.
- 5) To further understand the quality of experience dimensions within *Positive quality of experience* and *Stress-Challenge quality of experience*, the question “How are community service activities experienced by youth?” was examined qualitatively.

METHOD

The present study was part of a larger study conducted with the Centre of Excellence for Youth Engagement¹ examining the relations between temperament, youth activities, and a variety of potential outcomes (e.g., identity formation, health and well-being). In addition to answering questions about community service activities, participants were asked, as part of the larger study, about their hobbies, interests, extracurricular activities, and personal characteristics.

A mixed-methods sequential explanatory strategy (Cresswell, 2003) was used to test the hypotheses and research questions. A mixed-methods design enables researchers both to generalize findings and develop an in-depth view of the meaning of a phenomenon for individuals (Cresswell, 2003). In this strategy, quantitative data were collected and the hypotheses and research question were tested statistically, followed by the collection and analysis of qualitative data. The qualitative approach allowed for a detailed exploration of a select number of individuals. The data from both methods were combined at the results and interpretation stages (Creswell, 2003, p. 213).

Procedure

Recruitment

Clearance of Brock University's Research Ethics Board was obtained prior to recruitment (see Appendix A). Two phases of the study were conducted. In the first phase, participants completed a self-administered questionnaire. In the second phase, an interview was conducted with eight participants, who also had completed phase one of the study.

¹ The Centres of Excellence are funded by Health Canada. The opinions expressed in this document do not necessarily reflect those of Health Canada.

Phase One: The Survey

After obtaining permission by instructors, the study was announced in first and second year psychology courses during the last two weeks of classes in February 2005. A web-based experiment management software program was used to advertise the study on the Brock University Psychology Department web page. Instructions on how to obtain the study questionnaire packet also were posted on this program. In addition, posters advertising the study were placed on bulletin boards located throughout the University. Along with providing information about the study, the posters advertised the opportunity to use participation in the study for a course assignment and be entered into a raffle to win one of two \$50 prizes. The raffle was used as a later recruitment strategy to increase the number of participants.

Participants were instructed to pick up the study packet located in a box outside the principal investigator's office. Included in the packet was an information letter explaining the study, two consent forms (one to be returned and one for the participant to keep), the questionnaire, a raffle ballot (if relevant), and a return envelope for the completed forms. Completion of the entire questionnaire was expected to take approximately 60 minutes. Participants were instructed to return the completed packet, within two weeks of obtaining it, to the principal investigator's office. The principal investigator received the completed questionnaire in a sealed envelope from the participant and gave the participant a feedback letter. First-year psychology students then could use the consent form, signed by the researcher, as the basis for one of their course requirements. Participants interested in being entered into the raffle provided their name and contact information on the ballot and returned this with the other completed material.

Phase Two: The Interview

A section of the consent form contained a request for participants' permission to be contacted regarding the interview phase of the study. Participants were selected to participate in a telephone interview, based on one criterion: community service involvement within the last two years. The criterion was chosen to ensure more accurate accounts of community service experiences by the participants. Some participants reported participating in service three or four years prior; however, the retrospective accounts of these participants would have greater potential to result in inaccurate description of experiences than more recent experiences (Tourangeau, 2000).

Individuals ($n = 31$) who both consented to be contacted and were involved in community service within the last two years were eligible to be interviewed. They were emailed in April 2005 requesting that they respond if still interested in participating in the telephone interview. A positive response rate of 25.8% was received (6 women and 2 men). These participants were then contacted to obtain convenient interview times.

Before the start of the interview, participants were read an interview consent form. Participants were notified that the interview would be recorded using a mini-audiotape recorder. The participant then devised a pseudonym to be used throughout the interview in order to maintain confidentiality. Semi-structured interviews were conducted via telephone and lasted approximately 15-20 minutes.

Participants

In Phase One of the study, participants included 82 undergraduate students (59 women and 23 men) from first and second year psychology courses. Participants ranged in age from 17 to 20 years ($M = 18.57$, $SD = .629$). In Phase Two, eight participants (six

women and two men) from Phase One of the study participated in the telephone interview, selected based on the previously explained criterion. Interview participants ranged in age from 18 to 20 years ($M = 18.50$, $SD = .756$).

Demographic information of the participants is presented in Table 1 and several characteristics of the sample should be noted. First, a large number of participants were women. Second, the majority of participants reported their ethnic affiliation as European, with only a small percentage reporting visible minority affiliation. Third, there appeared to be a range of participants' mother's education status, although the majority of Phase One participants reported that their mothers completed some college or university and above. Half of the Phase Two participants reported that their mothers had this level of education.

Measures

A summary of measures is presented in Table 2 and copies of all measures can be found in Appendix B. As part of the larger study, questionnaire order was counterbalanced. The order of the measures for Survey A was the BIS/BAS, Activity Engagement, Community Service, and Identity, whereas the order for Survey B was Identity, BIS/BAS, Activity Engagement, and Community Service.

Demographic Information

Participants were asked to indicate their age, sex, university year, mother's level of education, and ethnic group(s) with which they identified. Level of mother's education was used to provide an estimate of the participants' socioeconomic status. The majority of participants indicated only one ethnic affiliation. A category entitled "Multiple" was created to encompass participants who reported two affiliations. Of the nine participants

who listed multiple affiliations, eight participants listed a combination of North American and European affiliations (e.g., Canadian and Italian, Polish and Canadian) and one participant listed a combination of European and Middle Eastern affiliations (English and Lebanese).

Table 1. *Demographic Characteristics of Participants.*

Variable	Phase One: Survey			Phase Two: Interview		
	Total Usable	<i>n</i>	(%)	Total Usable	<i>n</i>	(%)
Sex	82			8		
Men		23	28.0		2	25.0
Women		59	72.0		6	75.0
University Year	82			8		
1		76	92.7		7	87.5
2		6	7.3		1	12.5
Ethnic Affiliation	79			8		
Caucasian		8	9.8		1	12.5
North American		12	14.6		1	12.5
European		47	57.3		5	62.5
Middle Eastern		3	3.7		1	12.5
Multiple		9	11.0		0	0.0
Missing		3	3.7		0	0.0
Mother's Level of Education	80			8		
Not Applicable		1	1.2		1	12.5
Did not finish high school		7	8.5		0	0.0
Finished high school		20	24.4		3	37.5
Some College/University		13	15.9		2	25.0
Finished College/University		29	35.4		1	12.5
Finished Graduate degree		10	12.2		1	12.5
Missing		2	2.4		0	0.0

Table 2. *Summary of Measures.*

Construct Measured	Measure	Procedure	Scale and Scoring
Behavioural Inhibition (sensitivity to punishment and novelty)	Behavioural Inhibition System Scale (Carver & White, 1994)	Self-report Questionnaire	1-4 rating scale Averaged score of 7 items
Behavioural Activation (sensitivity to reward)	Behavioural Activation System Scale (Carver & White, 1994)		1-4 rating scale Averaged score of 13 items
Factors that help youth to get involved in a community service activity (e.g., belief in cause, peer or parent involvement)	Initiating Items for Community Service Involvement	Self-report Questionnaire and Interview	0-4 rating scale 6 items
Factors that help youth to stay involved in a community service activity (e.g., receive support from parents, peers, supervisor, making a difference)	Sustaining Factors for Community Service Involvement	Self-report Questionnaire and Interview	0-4 rating scale 8 items
Quality of community service experience (e.g., stress, challenge, rewarding, fun)	Quality of Experience adapted from the Centre of Excellence for Youth Engagement (Busseri & Rose-Krasnor, submitted)	Self-report Questionnaire and Interview	0-4 rating scale 9 items
Dimensions of community service activities (structure, social interaction, feedback)	Activity Dimensions	Self-report Questionnaire	0-4 rating scale 12 items
Future intention to participate in service	Intention to participate within 1 month, 6 months, and next year	Self-report Questionnaire	No/I'm not sure/Yes 3 items

Motivational Systems

Carver and White's (1994) BIS and BAS scales were used to assess motivational systems. The BIS is a 7-item measure (e.g., *"If I think something unpleasant is going to happen I usually get pretty 'worked up' "*). The BAS is a 13-item measure divided into three subscales: (a) *Reward Responsiveness* (five items; e.g., *"When I get something I want, I feel excited and energized"*); (b) *Drive* (four items; e.g., *"When I want something, I usually go all-out to get it"*); and (c) *Fun Seeking* (four items; e.g., *"I will often do things for no other reason than that they might be fun"*).

Carver and White (1994) conducted a factor analysis using the BIS/BAS scores from a sample of college students. The BIS scale, appearing fairly independent of the BAS scales, was correlated $-.12$ to $.28$ with the BAS subscales. Other researchers have found similar correlations between the BIS and BAS scales (Carver, 2004; Caseras et al., 2003; Jorm et al., 1999; Ross, Millis, Bonebright, & Bailey, 2002). Carver and White (1994) found that the three BAS scales all loaded on a general BAS factor, with scale reliabilities ranging from 0.66 to 0.76. Test-retest reliability, following an 8-week period, was 0.66 for BIS and ranged from 0.59 to 0.69 for the BAS subscales. Based on factor analysis, support for a four-factor model has been found (Heubeck et al., 1998; Jorm et al., 1999; Ross et al., 2002). However, several researchers (Campbell-Sills, Liverant, & Brown, 2004; Jorm et al., 1999) found that a two-factor solution of behavioural activation and behavioural inhibition was more appropriate. In the present study, the BAS composite scale was used, along with the BIS, to assess the two factors.

Two items on the BIS scale were reverse coded. Participants' BIS and BAS scores were summed and then averaged for each scale. By calculating the average of each

participant's score, any missing data that were present were eliminated. For example, for participants not missing data on BIS, their score would be averaged out of seven questions, whereas participants missing one item would have had their score averaged out of six questions. No participant was missing more than one question on each motivational system score. Scores on the BIS showed acceptable internal consistency (Cronbach's $\alpha = .795$, $n = 73$) and ranged from 1.43 to 4.00. The sample mean for the BIS was 2.99 ($SD = .578$). Scores on the BAS also showed acceptable internal consistency (Cronbach's $\alpha = .816$, $n = 72$) and ranged from 2.00 to 3.92. The sample mean for the BAS was 3.12 ($SD = .409$).

Community Service Involvement

Participants were asked to select a mandatory and voluntary community service activity to which they contributed the most time, either currently or in the past. If participants were involved in only one type of community service activity, then that activity was listed in the designated section. Participants then were asked to describe and rate their experiences in both of these service activities. If only one type of community service activity was listed, then that activity was rated. The majority of participants (63.4%) participated in both a mandatory and a voluntary service activity. The total number of hours spent participating in each activity was calculated. The activity to which the participant contributed the most time (regardless of the mandatory or voluntary nature) was selected for analysis. Mandatory activities accounted for 59.8% ($n = 49$) and voluntary activities accounted for 40.2% ($n = 33$) of the total community service activities used for analyses.

Initiating and Sustaining Factors

A 6-item measure assessed whom or what may have helped participants to get involved in the community service activity (*"How much would you say that the following things helped you to first get involved in the community service activity you chose?"*). These items (e.g., *"My friends were involved in a community service activity"*) were rated using a 5-point Likert-type scale with 0 = *not at all* and 4 = *extremely*. Participants also completed an 8-item measure that assessed whom or what may have helped them to stay involved in service (*"How much would you say that the following things helped you to stay involved in your community service activity?"*). These items (e.g., *"I received support from my supervisor or other volunteers"*) were rated on the same scale as mentioned above. The initiating and sustaining items were derived from studies examining factors that help youth both to become and stay involved in community service activities (e.g., Janoski & Wilson, 1995; Martinez & McMullin, 2004).

Activity Dimensions

Participants were asked to rate their community service experience, using a Likert-type scale, with 0 = *not at all* and 4 = *extremely*, on three activity dimensions: (a) 4 items relating to *Structure* (e.g., *"This community service activity had an adult leader"*); (b) 4 items relating to *Social Interaction* (e.g., *"This community service activity allowed me to interact with recipients in need"*); and (c) 4 items relating to *Feedback* (e.g., *"This community service activity was a place that I received positive feedback"*). Structure items were based on research findings from studies on youth involvement in extracurricular activities (Bartko & Eccles, 2003; Gilman, Meyers, & Perez, 2004; Huebner & Mancini, 2003; Larson, 2000; Mahoney, Schweder, & Stattin, 2002;

Mahoney & Stattin, 2000); social interaction questions were derived from studies on community service participation (McLellan & Youniss, 2002); and feedback questions were based on Foster and Meinhard's (2000) research on factors important to include in community service programs.

An initial exploratory factor analysis (EFA) was conducted using both Oblique (Oblimin with Kaiser Normalization) and Varimax rotations. There was no difference found between the two types of rotations in the number of factors that were extracted. Oblique rotation was used for all further factor analyses. The method of Oblique rotation allows the factors to be either correlated or uncorrelated, allowing the researcher to obtain a "better simple structure" (George & Mallery, 2003, p. 249).

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was used to determine whether the distribution of values was adequate for conducting factor analysis (George & Mallery, 2003). The KMO statistic should be greater than .50 to proceed with factor analysis (George & Mallery, 2003; Kaiser, 1974); the KMO statistic for these data was .660. Bartlett's Test of Sphericity was used to determine whether the correlation matrix was an identity matrix (George & Mallery, 2003). The result was significant, with $\chi^2(66) = 186.38, p < .001$, indicating that the data did not produce an identity matrix and were acceptable for factor analysis.

The initial principal component analysis extracted four factors with eigenvalues greater than 1 (eigenvalues = 3.04, 1.75, 1.41, 1.22). Upon examination of the factor loadings, minimal cross-loadings were discovered for the four-factor solution; however, two factors were ambiguous. Based on analysis of the scree plot, it was determined that a two-factor solution was optimal. The two factors accounted for 40% of the variance. The

two factors consisted of a *Structure* factor (eigenvalue = 3.04; 25% of the total item variance) and a *Supportive Social Environment* factor (eigenvalue = 1.75; 15% of the total item variance) combining social interaction and positive feedback items. Original hypotheses were formed under the presumption that a “social interaction” dimension would exist. Although the *Supportive Social Environment* factor that emerged contained different items than the predicted “social interaction” factor, the original hypothesis was still tested with the *Supportive Social Environment* factor substituted. The originally hypothesized *Feedback* factor did not surface in the factor analysis. Therefore, this factor was not used in any of the hypotheses. Factor loadings for the 12 activity dimension items for the two principal components identified as *Structure* and *Supportive Social Environment*, are presented in Table 3. The correlation between these two components was -.203.

Items in the *Structure* and *Supportive Social Environment* dimensions were averaged for each participant for each scale. No missing data were present for any of the eight items used to calculate the scores for the two dimensions. Scores on the *Structure* dimension showed acceptable internal consistency (Cronbach's $\alpha = .712$, $n = 75$) and ranged from .25 to 4.00. The sample mean for the *Structure* dimension was 3.01 ($SD = .805$). Scores on the *Supportive Social Environment* dimension also showed acceptable internal consistency (Cronbach's $\alpha = .707$, $n = 75$) and ranged from .75 to 4.00. The sample mean for the *Supportive Social Environment* dimension was 2.73 ($SD = .871$).

Table 3. *EFA Pattern Matrix Loadings for 12 Activity Dimension Items.*

Activity Dimension	Structure	Supportive Social Environment
This community service activity:		
(2) took place at regular times	.806	-.000
(3) had clear goals to work toward	.731	-.133
(1) had an adult leader	.727	.072
(4) required me to follow rules	.612	-.096
(7) involved doing tasks with a team	.048	-.865
(6) was a place to meet new people	-.051	-.842
(10) was a place I received positive feedback	.204	-.584
(9) provided training	.003	-.535
(12) was a place I received negative feedback	-.035	-.114
(11) was a place I received neutral feedback	.068	.119
(5) allowed me to interact with recipients in need	.069	.235
(8) involved doing tasks by myself	-.096	-.243

Note. EFA = exploratory factor analysis. Loadings are bolded for each dimension.

Quality of Experience

Quality of community service experience was assessed using the quality of experience questions (e.g., “*How much fun is or was this activity?*”), adapted from the Centre of Excellence for Youth Engagement’s Activity Matrix (Busseri & Rose-Krasnor, submitted). The eight qualities (*Fun, Good At, Challenge, Stress, Importance to Self, Importance to Society, Difficulty in Giving Up, and Influence*) plus an additional quality, *Reward*, were assessed for the service activity in which the participants contributed the most time, using a 5-point Likert-type scale with 0 = *not at all* and 4 = *extremely*.

EFA was conducted using Oblique (Oblimin with Kaiser Normalization) rotation.

The KMO statistic for these data was .887. Bartlett’s Test of Sphericity was significant

with $\chi^2(36) = 327.712, p < .001$, indicating that the data were acceptable for factor analysis.

The initial principal component analysis extracted two factors with eigenvalues greater than 1 (eigenvalues = 4.86, 1.31). Three and four factor solutions also were extracted and examined; however, these solutions produced ambiguous factors. Based on analysis of the scree plot of the two-factor solution, it was determined that a two-factor solution was optimal. The two factors accounted for 68.5% of the variance. The two factors consisted of a *Positive* factor (eigenvalue = 4.86; 54% of the total item variance), and a *Stress-Challenge* factor (eigenvalue = 1.31; 14.5% of the total item variance). Factor loadings for the nine quality of experience items, including loadings for the two principal components identified as *Positive* and *Stress-Challenge*, are presented in Table 4. The positive correlation between these two components was .27.

Items in the *Positive Quality of Experience (Positive QE)* and the *Stress-Challenge Quality of Experience (Stress-Challenge QE)* dimensions were summed and then averaged for each participant for each scale. Averaging the quality of experience items into one factor score for each dimension resulted in any missing data being averaged into the score. For example, if a participant was missing one *Positive QE* item, the score would be averaged out of eight items instead of nine. The decision to average the items was based on several factors. First, because the sample size was fairly small, deletion of a few cases would have resulted in a loss of participants that could not be afforded. Second, because only one item represented each quality of experience, participants' scores on this item could not be estimated from other related items. However, because only two items existed for the *Stress-Challenge* component,

participants missing data on either item were removed from analyses using this component. Scores on the positive dimension showed acceptable internal consistency (Cronbach's $\alpha = .904$, $n = 69$) and ranged from .71 to 4.00. The sample mean for the positive dimension was 2.89 ($SD = .807$). Scores on the *Stress-Challenge* dimension were significantly positively intercorrelated ($r = .46$, $n = 75$) and ranged from .00 to 4.00. The sample mean for the *Stress-Challenge* dimension was 2.19 ($SD = .892$).

Table 4. *EFA Pattern Matrix Loadings for 9 Quality of Experience Items.*

	Positive	Stress-Challenge
(1) fun	.889	-.074
(6) important to self	.860	.134
(5) rewarding	.817	.027
(8) hard to give up	.810	.149
(9) influence in activity	.775	.125
(2) good are you at the activity	.760	-.314
(7) important to society	.533	.323
(4) stressful	-.073	.882
(3) challenging	.265	.738

Note. EFA = exploratory factor analysis. Loadings are bolded for each dimension.

Future Intention to Participate in Community Service

Participants were asked to indicate whether they planned to participate in any type of community service activity within the next month, next 6 months, and next year.

Participants indicated their intention to participate by selecting either "Yes" (3), "I'm not sure" (2), or "No" (1) for each period stated. For the purpose of this study, a positive response within the first two periods (1 month or 6 months) was used to determine intended community service participation within the next 6 months. The reason why the

one-year data were not used in the current study was because a large percentage of participants (64%) said that they were willing to participate in the next year. Along with not having enough variability in the measure, I believed that a six-month period would be a more accurate estimate of the participants' intentions. If participants reported a "yes" within one of the two time periods they were given a score of 3; if they reported a "no" within both time periods they were given a score of 1; if they reported an "I don't know" within both time periods they were given a score of 2; and if they reported a combination of "no" and "I don't know" across the two time periods they also were given a score of 2 because they still indicated uncertainty of whether they intended to participate.

Participants' scores ranged from 1.00 to 3.00. The sample mean for future intention to participate within the next 6 months was 2.32 ($SD = .738$). Sixteen percent of participants reported that they did not intend to participate, 34.7% reported that they were not sure if they would participate, and 49.3% reported that they indeed did intend to participate in a community service activity within the next 6 months.

Interview Schedule

A semi-structured interview approach was used to allow the interviewer to obtain more in-depth responses from some participants about their community service experiences than obtained from the questionnaire. Way (2005) stated, "an openness to the unexpected, however, cannot be maintained if one listens only for what is expected (e.g., theory testing)" (p. 534), emphasizing a strength of utilizing interviewing techniques, which permit unexpected findings to emerge. Interviews were conducted following the quantitative data collection between the end of April and the beginning of June 2005.

Prior to asking the interview questions, a scenario was given to the participant about temperament and the participant was then asked to describe his or her own temperament to ensure that he or she understood what the term “temperament” meant (see Appendix B). Interview participants’ BIS and BAS scores were coded using a rating of high, medium, and low. BIS/BAS scores from the questionnaire were standardized and the z-scores were extracted for the interview participants; 1 standard deviation above the mean was categorized as high, 1 standard deviation below the mean as low and the range between these standard deviations was considered medium. Participants’ temperament descriptions were coded based on the number and severity of words used, as can be seen in Appendix C. Participants who did not mention BIS or BAS characteristics were categorized as lower on the dimensions, several characteristics and high severity as higher on the dimensions, and a few to several characteristics with low severity as medium on the dimensions. I then looked at the high, medium, and low classifications for both the quantitative and qualitative data. Some were coded similarly to the z-scores; however, some differed.

Following this, participants were asked questions about initiating and sustaining factors of community service (e.g., *“What kinds of things would help someone, with a similar temperament to your own, get involved in a community service activity?”* and *“What kinds of things would help someone, with a similar temperament to your own, stay involved in a community service activity?”*).

In the *experience* and *reflections* sections of the interview, participants were asked to focus on one community service experience, pre-selected from the participant’s questionnaire responses by the interviewer, based on the activity to which they

contributed the most time. In the *experience* section, participants were asked to elaborate on the quality of their service experience based on the activity quality questions from the Activity Matrix (Busseri & Rose-Krasnor, submitted). Six of the nine qualities (*Fun, Good At, Rewarding, Influence, Challenging, and Stressful*) were used (e.g., “Tell me about the aspects of the community service activity that you found to be the most fun” and “What do you consider to be the most challenging aspects of the community service activity?”). Finally, interview participants were asked to reflect on their community service experience (e.g., “What advice would you give to someone like yourself, so again, someone who is similar to you in temperament, who is deciding to participate in a community service activity?”), suggesting advice for someone deciding to become involved in a community service activity.

Generalizability and reliability play a minor role in qualitative inquiry (Cresswell, 2003). However, validity, also termed “credibility” or “trustworthiness” (Lincoln & Guba, 1985), is a strength of qualitative research and a necessity to ensure accurate findings. To increase the credibility of the qualitative data two strategies were utilized: triangulation and negative cases (Cresswell, 2003; Lincoln & Guba, 1985; Patton, 2002), discussed next. Procedures to ensure transferability and confirmability of findings (Lincoln & Guba, 1985) also are discussed below.

Triangulation

In the current study, both quantitative and qualitative data were collected. This type of approach, used to bring together findings from different data sources, is known as triangulation. (Cresswell, 2003; Lincoln & Guba, 1985; Patton, 2002). Triangulation is valuable in helping to counteract the threats to validity identified within each kind of data

(Berg, 1995). A second type of triangulation used was having the data analyzed by two different researchers. Specifically, a psychology graduate student, in addition to the principal researcher, analyzed the interview transcripts to help ensure that the categories and themes that emerged were reliable (see Appendix D for Confidentiality form).

Negative Cases

The objective of using negative cases is to refine the hypothesis until it accounts for all cases in the sample (Lincoln & Guba, 1985). During the process of analysis, cases that did not fit the pattern of findings were considered and documented. For example, most interview participants discussed aspects of the activity that they found stressful; however, one interview participant reported that he did not experience any stressful aspects in his community service activity. Therefore, this case was discussed and compared to other cases within the quality of experience dimension being examined.

Transferability

Thick, rich description, in which descriptions are detailed and concrete, is to be presented “in such a way that we can understand the phenomenon studied and draw our own interpretations about meanings and significance” (Patton, 2002; p. 438). This type of description is necessary to allow the reader to gain a clear picture of the qualitative component of the research process and findings and to allow for those interested in making a transfer (e.g., to other situations or environments) possible (Cresswell, 2003; Lincoln & Guba, 1985). In the present study, thick description was used when describing the research interviews and the findings that emerged from the participants’ responses to the interview questions.

Confirmability

To validate the qualitative findings in the present study, two strategies were used. Triangulation (using multiple data sources and analysts) has previously been discussed. A second strategy used was keeping a reflexive journal (Lincoln & Guba, 1985). This journal contains research thoughts, hypotheses, and other information related to the interviews and analyses of the qualitative data. The analysis process for the present research was documented, detailing the hypotheses that were tested, to ensure that the researcher considered a variety of categories to best represent the data.

Qualitative Data Analysis Procedures

The present study used thick description to increase transferability of findings. Representative quotes from participants are reported in the results section of the study, alongside the quantitative data, giving participants a “voice” when describing their experiences (Patton, 2002).

The transcription of interviews was completed in June 2005 by the principal researcher. Cross-case analysis, which involves grouping together answers from different participants for each interview question (Patton, 2002), was used in the present study. First, each interview question was extracted from the transcripts and combined into separate data files so that participants’ responses to the same question were grouped together. Once the responses were compiled, each response was read to gain an overall sense of the information that each of the participants reported. Then, each participant’s response was re-read and participants’ own words and phrases used to describe their responses to each question were highlighted. Descriptive words and phrases were then recorded along the left-hand column of the page beside each participant’s response. Each

descriptor was entered into a file and similar ideas were grouped together. Responses were then coded using constant comparative analysis (Patton, 2002). This method involves continually cycling through the data, making comparisons between interview responses and the derived categories until it is certain that the categories that emerge are verified, helping to increase the validity of the findings.

Only a small number of discrepancies were found between the two researchers' coding. These discrepancies involved terminology and were not, therefore, substantive disagreements (e.g., "*Positive Expressions from Children/Others*" versus "*Kids Having Fun*"). The discrepancies were discussed between the researchers to be sure that each category contained the same information even if the category was described differently.

RESULTS

Data Screening

Data entry was checked manually and then screened for accuracy of input. All values were within range of the scales. Data also were screened for missing data, normality, and outliers.

Missing Data

Eighty-two participants completed questions on their community service activities. Because of missing data on one or more questions from the initiating and sustaining items, two participants were removed from the analysis of Hypothesis 1. Seven participants were removed from the analyses of Hypotheses 2 to 4, which involved the prediction of qualities of experience from motivational systems and activity dimensions, as well as the prediction of future service intention from motivational systems with quality of experience acting as a mediator. Of these 7 participants, 5 were removed because no data were available on their future intention to participate in community service. Another participant was removed because she was missing data on one of the stress-challenge variables (challenge), thus preventing the scores from being averaged. An additional participant was dropped from these analyses because he was missing data on two positive quality of experience items (good at, rewarding). Therefore, 75 participants' data were used for the analyses of Hypotheses 2 to 4.

Distributions

Distributions were examined for departures from normality and the presence of outliers. Skewness and kurtosis values were examined to find out if the distributions were adequately normal. Skewness refers to the symmetry of the distribution of values around

the mean, whereas kurtosis is a measure of the peakedness of the distribution (George & Mallery, 2003). The skewness and kurtosis values are presented in Table 5.

If a distribution is normal, the skewness and kurtosis values would be 0 (George & Mallery, 2003). According to George and Mallery (2003), skewness and kurtosis values between ± 1 are considered excellent and values between ± 2 are considered acceptable. As shown in Table 5, all distributions had excellent skewness and kurtosis values, suggesting that these distributions were adequately normal.

Table 5. *Skewness and Kurtosis Values.*

	Skewness	Kurtosis
1) Behavioural Inhibition Scale	-.398	.158
2) Behavioural Activation Scale	-.600	.175
3) Structure	-.795	.724
4) Supportive Social Environment	-.460	-.477
5) Positive Quality of Experience	-.836	.183
6) Stress-Challenge Quality of Experience	-.219	.070
7) Future Intention to Participate in Community Service	-.593	-.933

Note. $n = 75$

To identify outliers among the variables, each variable was standardized and z-scores and scatterplots were examined. Z-scores greater than ± 3.29 ($p < .001$, two-tailed test) signify potential outliers (Tabachnick & Fidell, 2001). A z-score of -3.42 was found among the *Structure* dimension for one participant, such that the participant reported that her activity was very low in structure ($M = .25$ on the 0-4 point scale). Analyses were

conducted both with the participant included and with the participant removed. Only minimal differences were found between the means of the *Structure* dimension (i.e., $M = 3.01$ versus $M = 3.04$) and in the results of the hierarchical multiple regressions; therefore, the participant was kept in the data set.

Correlations Between Variables

Zero-order and partial correlations among the variables are presented in Table 6. Correlations among the demographic variables (sex, age, and mother's level of education) and model variables were examined. As can be seen in Table 6, BIS was significantly and positively correlated with sex, such that women were more likely than men to have received a higher rating on BIS. This is consistent with Carver and White's (1994) findings in which women received a higher score on BIS than did men. In addition, *Positive QE* also was significantly and positively correlated with sex, such that women were more likely than men to have rated the quality of their community service experience as higher on the positive dimension. Thus, sex was controlled in all analyses involving BIS and BAS.

Partial correlations between predictors were examined (BIS, BAS, *Structure*, and *Supportive Social Environment*; see bottom half of Table 6) controlling for sex. BIS was significantly and negatively correlated with BAS. In addition, *Structure* was significantly and positively correlated with *Supportive Social Environment*. Thus, for each analysis involving BIS, BAS was controlled. Similarly, BIS was controlled for each analysis involving BAS.

Partial correlations (with sex partialled out) between predictors and outcomes (*Positive QE*, *Stress-Challenge QE*, and *Future Intention* to participate in community

Table 6: Zero-order Correlations and Partial Correlations (controlling for participant sex).

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
	<u>Zero-Order Correlations</u>									
1. Sex		-.103	-.125	.305**	.173	.005	-.012	.239*	.098	.151
2. Age			-.261*	.022	.026	-.126	-.177	-.064	.018	.077
3. Mother's Education				-.171	-.058	-.030	.018	.051	.017	-.016
4. BIS					-.284*	-.006	.007	.087	.179	.174
5. BAS						-.014	.150	.224 [†]	.044	-.013
6. Structure							.319**	.071	.210 [†]	-.220 [†]
7. Supportive Social Environment								.461**	.441**	.198 [†]
8. Positive QE									.439**	.446**
9. Stress-Challenge QE										.165
10. Future Intention to Participate										
	<u>Partial Correlations</u>									
1. Sex										
2. Age										
3. Mother's Education										
4. BIS										
5. BAS										
6. Structure										
7. Supportive Social Environment										
8. Positive QE										
9. Stress-Challenge QE										
10. Future Intention to Participate										

Note. Men = 1, Women = 2. Means and standard deviations for BIS and BAS can be found on p. 45, Structure and Supportive Social Environment on p. 48, Positive and Stress-Challenge QE on p. 51, and Future Intention to Participate on p. 52.

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$; two-tailed.

service) and among outcomes were examined. *Positive QE* was significantly and positively correlated with both *Supportive Social Environment* and *Stress-Challenge QE*. Furthermore, *Positive QE* was significantly and positively correlated with future intention to participate in community service. Finally, *Stress-Challenge QE* was significantly and positively correlated with *Supportive Social Environment*.

The primary results of the present study will be presented by first outlining each hypothesis and then examining the quantitative data in combination with the qualitative data. Hypothesis 1, involving initiating and sustaining factors of community service, and Hypothesis 2, involving predictions of a match between motivational systems scores and activity dimensions when predicting quality of experience, include both quantitative and qualitative data. Hypotheses 3 and 4, however, involving quality of experience acting as a mediator between motivational systems scores and future intention to participate in service are based solely on quantitative data. Representative quotes from interviewees will be provided to supplement the quantitative findings.

Hypothesis One: BIS/BAS and Initiating and Sustaining Items

In Hypothesis One, the question “Do people with higher BIS scores differ from people with higher BAS scores on initiating and sustaining factors with respect to community service activities?” was examined. Partial correlations were calculated between the two motivational systems and initiating and sustaining items of community service participation. Sex and BAS were significantly correlated with BIS; therefore, they were controlled when examining initiating and sustaining factors and BIS. Similarly, sex and BIS were controlled when examining initiating and sustaining factors and BAS. Partial correlations are presented in Table 7.

Initiating Factors

Each initiating factor for community service involvement will be discussed by examining the combination of quantitative and qualitative data. Initiating factors found to be important to individuals higher on BIS are presented first, then the initiating factors found to be important to individuals higher on BAS, followed by initiating factors found to be important to individuals regardless of their motivational system orientation.

Initiating factors that were assessed quantitatively include *Options in the Community*, *Friends Involved*, *Belief in a Cause*, *Skills and Knowledge*, *Enjoyment Expectations*, and *Parents/Family Involved*. Interview participants (n = 8) reported many descriptive phrases when responding to the interview question about initiating factors for community service activities. The seven categories that emerged from the descriptors are as follows: *Promoting Activity Availability* (62.5% of interviewees), *Participate with Familiar Others* (37.5% of interviewees), *Familiar/Comfortable Environment* (25% of interviewees), *Interests Relating to Activity* (12.5% of interviewees), *Expectations of Enjoyment* (12.5% of interviewees), *Offer a Position* (12.5% of interviewees), and *Flexible Hours* (12.5% of interviewees).

As can be noted from the factors above, some of the qualitative factors that emerged were found to be similar to the factors assessed quantitatively (see Table 8 for a summary of quantitative variables and qualitative categories). For example, both the quantitative factor *Friends Involved* and the qualitative factor *Participate with Familiar Others* concerned participants becoming involved either because their friends were already involved in community service or they began participating in an activity with a friend. In addition, the quantitative factor *Options in the Community* and the qualitative

Table 7. Means, Standard Deviations, and Partial Correlations Between Motivational Systems and Initiating and Sustaining Items.

	<i>M</i>	<i>SD</i>	BIS ^a	<i>p</i>	BAS ^b	<i>p</i>
Initiating Items						
1. Options in community	1.91	1.34	.047	.682	.260	.021
2. Friends involved	1.55	1.43	.222	.051	.019	.869
3. Belief in a cause	2.79	1.36	.203	.074	.212	.063
4. Skills and knowledge	2.70	1.26	.009	.939	.137	.232
5. Enjoyment expectations	3.09	1.12	-.013	.912	.033	.773
6. Parents/family involved	1.14	1.39	-.093	.417	-.038	.739
Sustaining Items						
1. Felt comfortable	3.36	0.86	-.034	.765	.120	.294
2. Support from family and friends	2.74	1.18	-.002	.988	.289	.010
3. Variety of tasks	2.70	1.11	-.210	.065	.112	.329
4. Recognition of accomplishments	2.84	1.21	.066	.568	.162	.155
5. Enjoyed goals	3.03	0.95	.193	.090	.286	.011
6. Support from supervisor	3.16	0.97	.236	.037	.157	.169
7. Making a difference	3.16	1.11	.177	.122	.311	.006
8. Learned something	2.94	1.11	.056	.624	.161	.160

Note. *n* = 80.

^aBAS and sex partialled out. ^bBIS and sex partialled out.

factor *Promoting Activity Availability* both emphasized the importance of youth being informed of available community service positions. Moreover, the quantitative factor *Enjoyment Expectations* and the qualitative factor *Expectations of Enjoyment* both focused on youths' perceptions of how much they expected to enjoy the community service activity prior to involvement. Furthermore, the quantitative factor *Skills and Knowledge* and the qualitative factor *Interests* both centred on the opportunity to utilize pre-existing skills and likes and dislikes. A unique factor to the quantitative data was *Belief in a Cause* and unique factors to the qualitative data were *Familiar/Comfortable Environment*, *Offer a Position*, and *Flexible Hours*. The importance that the above-mentioned categories have within each motivational system is discussed below.

Initiating Factors Important to BIS

As seen in Table 7, a positive correlation at a trend level of significance was present between BIS and *Friends Involved*. Similarly, in the qualitative component, the category *Participate with Familiar Others* emerged. Of the three interview participants who reported this factor as being important, two of them were classified as being higher in BIS and lower in BAS and the other as medium on both motivational systems, suggesting that this category also may be slightly relevant to participants higher on BAS. Becoming involved with familiar others was reported as making entrance into the activity easier because youth would know people and would not be starting the activity by themselves.

Table 8. *A Summary of Factors Relevant to Initiating and Sustaining Community Service.*

Quantitative	Qualitative
Initiating Factors	
Friends Involved ^a	Participate with Familiar Others ^a
Options in the Community ^b	Promoting Activity Availability ^b
Belief in a Cause ^c	
	Flexible Hours ^b
	Familiar/Comfortable Environment ^a
	Offer a Position ^a
	Expectations of Enjoyment ^c
	Interests ^c
Sustaining Factors	
Support from Supervisor ^a	
Variety of Tasks ^a	
Enjoyed Goals ^c	
Support from Family and Friends ^b	
Making a Difference ^b	Feelings of Making a Difference ^b
	Comfortable Doing Activity ^a
	Interested in Activity ^a
	Appreciated and Praised at Site ^b
	Meeting New People/Making New Friends ^c
	Positive Experiences ^c
	Participate With Familiar Others ^c
	Positive Social Interactions ^c

Note. Quantitative factors in table are only those found to be statistically significant or at a trend level of significance ($p < .1$). Qualitative factors are all of the categories that emerged from the interview data.

^a important for individuals higher in BIS.

^b important for individuals higher in BAS.

^c important for individuals regardless of motivational system orientation.

Katherine: *Like, if there's something offered through the school you know you can get a bunch of your friends together and say "hey, let's do this together" and it makes it a lot easier. Because you know people there...and even if it's not your friends, just knowing people from your school are there can make it a lot easier on you.*

Monica: *I guess it would be good if they started community service with somebody. You know...just so that you're not going into a situation on your own.*

A category that emerged within the qualitative data, but not assessed quantitatively, was *Familiar/Comfortable Environment*. The two interview participants mentioning this category were both classified as being relatively high in BIS. They reported that feeling comfortable going into the activity would help someone to get involved because the situation would be familiar.

William: *...just to get them more comfortable right away because then I'm sure they'd be more efficient in that environment. If they did feel as comfortable as possible so...maybe something just with a bit of familiarity or just a bit of comfort.*

An additional category reported by one participant, coded as medium in BIS, was *Offer a Position*. It was reported that offering an available position directly to the youth and bringing the position to him or her, rather than requiring the youth to seek out the position, would help someone to get involved.

Mark: *I would say having someone offer a community service position...Or, yeah, bring it to them.*

Initiating Factors Important for BAS

BAS was significantly and positively correlated with *Options in the Community*. Similarly, within the qualitative data, the category of *Promoting Activity Availability* emerged. Four of the five interview participants who reported that this factor was important were classified as being relatively high or medium on BAS; however, one interview participant was classified as being low on BAS and high on BIS, suggesting that this category also may be slightly relevant to individuals lower in BAS and/or higher on BIS. These interview participants reported that promoting available activities and making information accessible within the school and community environment would help others to get involved by demonstrating the opportunities available to youth; advertisements were reported as one way of demonstrating such availability.

Heather: *Well, I guess things like advertisements and stuff like that. Because a lot of the time people don't know about things. And miss an opportunity.*

Sarah: *Probably if there was advertisements around a school or an area, like your community or something...So if it's something that is, like advertised as something you would normally do and have fun and I think that would really help in this situation.*

An interview participant, classified as being medium on BAS, reported an initiating factor, not assessed quantitatively, regarding *Flexible Hours*. It was reported that if the hours of participation were flexible and worked around youths' schedules, then this might help someone to become involved in a community service activity because one could participate when it is most convenient.

Mary: *...have hours that work around school hours.*

Initiating Factors Important for BIS and BAS Combined

Positive correlations at a trend level of significance were present between BIS and *Belief in a Cause* and between BAS and *Belief in a Cause*. No such category emerged within the qualitative data for either motivational system.

Interview participants discussed two additional initiating factors that were found to be important, regardless of level of either motivational system. One interview participant, who was classified as medium on both motivational systems, reported *Expectations of Enjoyment*. It was suggested that becoming involved in an activity that youth expect to enjoy would help someone to get involved. Although the factor *Enjoyment Expectations* was assessed quantitatively, it was not found to be significantly related to either motivational system.

Sarah: ...you enjoy doing I think that would motivate like, myself and someone with the same temperament to go out and actually participate. If it's something that you don't enjoy doing then obviously you wouldn't do it.

Furthermore, one interview participant, who was classified as being medium on both motivational systems, reported the initiating factor *Interests*. She indicated that having activities available to youth that reflect their interests and to which they can relate would help someone to get involved in community service. The initiating factor *Skills and Knowledge*, which was assessed quantitatively and possibly similar to the qualitative category of *Interests*, was not found to be significantly related to scores on either motivational system.

Sarah: ...displaying things that maybe you can relate to. Things, hobbies or things that you already do and that you like, likes or dislikes, whatever...Anything that you can relate to...

In sum, four factors appeared to be important in helping specifically youth higher in BIS to become involved. The quantitative factor of having friends involved in the activity and the qualitative factors of participating with familiar others, being familiar with and comfortable in the service environment, and being offered a position directly were found to be important. Furthermore, three factors were found to be important specifically to youth higher in BAS. The quantitative factor of having options available in the community and the qualitative factors of having access to information about community service positions and having flexible hours that allow youth to work around their schedules were found to be important. In addition, three factors were found to be important to youth regardless of level of motivational systems. The quantitative factor of believing in the cause that the organization or activity supports and the qualitative factors of expecting to enjoy the activity and interests related to the service activity were found to be important.

In order to retain these newly recruited participants, it is important to understand the factors that help youth to stay involved in a community service activity once they have already started. Sustaining factors that were found to be important to youth in the present study are discussed in the following pages.

Sustaining Factors

Sustaining factors for community service involvement are discussed by examining the combination of quantitative and qualitative data for each factor. Sustaining

factors that were found to be important to individuals higher on BIS are presented first, followed by the sustaining factors that were found to be important to individuals higher on BAS. Finally, sustaining factors that were found to be important to individuals regardless of their motivational system orientation are presented (see the lower half of Table 8 for a summary of quantitative variables and qualitative categories).

Sustaining factors that were assessed quantitatively included *Felt Comfortable*, *Support from Family and Friends*, *Variety of Tasks*, *Recognition of Accomplishments*, *Enjoyed Goals*, *Support from Supervisor*, *Making a Difference*, and *Learned Something*. The eight interview participants reported many descriptive phrases when discussing the factors that helped youth to sustain involvement. Eight categories emerged from the qualitative data: *Positive Experiences* (62.5% of interviewees); *Meeting New People and Making New Friends* (50% of interviewees); *Comfortable Doing Activity* (25% of interviewees); *Feelings of Making a Difference* (25% of interviewees); *Participate with Familiar Others* (12.5% of interviewees); *Appreciated and Praised at Site* (12.5% of interviewees); *Positive Social Interactions* (12.5% of interviewees); and *Interested in Activity* (12.5% of interviewees).

As can be noted from the factors above and seen in Table 8, some qualitative sustaining factors that emerged were found to be similar to the sustaining factors assessed quantitatively. For example, the quantitative factor *Felt Comfortable* and the qualitative factor *Comfortable Doing Activity* both emphasized the importance of feeling comfortable being involved with the community service activity. In addition, the quantitative factor *Making a Difference* and the qualitative factor *Feelings of Making a Difference* both centred on the feelings experienced by participants that were derived

from contributing to and viewing tangible differences being made within the activity. Furthermore, the quantitative factor *Recognition of Accomplishments* and the qualitative factor *Appreciated and Praised at Site* both emphasized the importance of being recognized and appreciated by others involved in the service activity.

Several sustaining factors were unique to the quantitative data: *Support from Supervisor*; *Variety of Tasks*; *Enjoyed Goals*; *Support from Family and Friends*; and *Learned Something*. Factors unique to the qualitative data also emerged: *Interested in Activity*; *Meeting New People/Making New Friends*; and *Positive Experiences*. The importance that the above-mentioned categories have within each motivational system is discussed below.

Sustaining Factors Important for BIS

BIS was significantly and positively correlated with the sustaining factor *Support from Supervisor*. Interview participants higher in BIS reported no such category; however, an interview participant higher in BAS reported a similar category, which will be discussed below. A negative correlation at a trend level of significance was present between BIS and *Variety of Tasks*. No such category was reported qualitatively.

A sustaining factor not found to be statistically significant quantitatively, but reported by two interview participants, was *Comfortable Doing Activity*. The two interview participants who mentioned this category were both classified as being higher on BIS. They reported that feeling comfortable within the community service activity was something that would help youth to stay involved in the activity.

Monica: *And feel comfortable with so that they have a reason to stay I guess.*

William: *Once again if they are comfortable in the environment then there'd be really no reason to leave.*

One interview participant, who was classified as being higher in BIS, reported an additional sustaining factor of *Interested in Activity*, which was not assessed quantitatively. Being interested in the activity and the tasks that were being performed was reported as a way to help someone to stay involved in the community service activity.

Monica: *Or if they felt interested in whatever... Yeah, I think if it was something that they were really interested in...*

Sustaining Factors Important for BAS

BAS was significantly and positively correlated with *Support from Family and Friends*. No such categories were reported qualitatively. Furthermore, BAS was significantly and positively correlated with the quantitative factor *Making a Difference*. Similarly, one interview participant who was classified as being relatively high in BAS reported the factor *Feelings of Making a Difference*. She indicated that being in an activity that resulted in feelings of making a difference within the activity and with the recipients would help someone to stay involved in an activity.

Heather: *Like as long it's something I feel like I'm making a difference with.*

The factor *Recognition of Accomplishments* was not significant in the quantitative data; however, a similar factor *Appreciated and Praised at Site* was reported by an interview participant. The interview participant, who was classified as being medium in BAS, indicated that being praised when youth are doing a good job in the activity and

being appreciated for all the hard work done would help someone to stay involved in a community service activity.

Mary: *For them to be praised when they're doing a good job and to be appreciated at the volunteer work place.*

Sustaining Factors Important for BIS and BAS Combined

BAS was significantly and positively correlated with *Enjoyed Goals*. In addition, a positive correlation at a trend level of significance was present between BIS and *Enjoyed Goals*. No such category was reported qualitatively.

Regardless of their motivational system orientation, participants reported four additional sustaining factors in the interview. One of the two most frequently reported sustaining factors was *Meeting New People/Making New Friends*. Two interview participants who reported this category were classified as medium on both BIS and BAS and two participants were classified as being either medium or high on BIS and low on BAS. The interview participants reported that meeting others to whom one could relate and making friendships with others in the community service activity would help someone to stay involved in the activity.

Katherine: *As well as being able to meet new people that you are volunteering with...who share, you know, similar interests with you that you can become friends with outside of the program and then continuing that way.*

Sarah: *Maybe you met some new people, some interesting people and they weren't just, just so much acquaintances but you actually became friends with them, got to know them.*

The second most reported sustaining factor, reported by five of the eight interview participants, was *Positive Experiences*. Two interview participants who reported this category were classified as being medium on both BIS and BAS, two participants as being high or medium on BAS and low on BIS, and one participant was classified as being high on BIS and medium on BAS. These interview participants reported that being involved in an activity that was rewarding, fulfilling, and enjoyable would motivate someone to stay involved in the activity. Furthermore, if there were no problems within the activity and things were going well then youth would be more likely to stay involved.

Sarah: *Probably just that the activity was something that was really enjoyable.*

William: *If it, everything is going well and there's no problems or anything then there'd once again not be any reason to leave so they would just like to stay there and continue helping out.*

Two additional sustaining factors that were reported in the interviews are as follows: *Participate With Familiar Others* and *Positive Social Interactions*. One interview participant, classified as being medium on both BIS and BAS, suggested that being able to participate in activities with friends would be helpful for someone to stay involved. Furthermore, one interview participant, also classified as being medium on both BIS and BAS, reported that having positive interactions with other individuals involved in the activity would also motivate someone to stay in the activity.

Katherine: *I think again being able to do it with friends would be helpful.*

Rebecca: *And positive interaction with the people you're helping as well as the people you are working with.*

In sum, four factors appeared to be important in helping specifically youth higher in BIS to sustain community service participation. The quantitative factors of receiving support from their community service supervisor and doing more focussed tasks rather than a variety of tasks, as well as the qualitative factors of being comfortable participating in the activity and being interested in the activity, were found to be important. Three sustaining factors appeared to be important for youth specifically higher in BAS. The quantitative factors of receiving support from family and friends and feelings of making a difference within the activity, as well as the qualitative factor of being appreciated and praised at the community service site, were found to be important. Five sustaining factors were found to be important for participants regardless of their motivational system orientation. The quantitative factor of enjoyment of working toward goals set out by the activity and the qualitative factors of meeting new people and making new friends, having positive experiences within the activity, participating with familiar others, and participating in positive social interactions with others involved in the activity were found to be important.

It is evident from the combination of quantitative and qualitative results that motivational systems were related to some different initiating and sustaining factors, whereas other factors were found to be important to youth regardless of their motivational system orientation. Next, I will outline the advice for getting involved in community service that emerged from the interviews.

Suggestions for Initiating Involvement

In addition to reporting on initiating and sustaining factors for community service, interview participants also provided advice for someone similar in temperament to

themselves who was deciding whether to participate in an activity or not. Seven categories emerged from their responses: *Get Informed/Get Involved* (50% of interviewees); *Try a Variety of Activities* (37.5% of interviewees); *Select Activities Based on Enjoyment/Interests* (37.5% of interviewees); *Persistence* (37.5% of interviewees); *Participate with Familiar Others* (25% of interviewees); *Meet New People* (25% of interviewees); and *Personal Characteristics* (12.5% of interviewees).

Similar to the category that emerged as an initiating factor, the advice category *Participate with Familiar Others* was suggested by interview participants classified as being relatively high on BIS. Participants recommended that youth should go with a friend when starting a community service activity so that it is less stressful.

Monica: *I think it's important to go...with people you'll actually get along with. Because otherwise, it could become stressful and I don't think it should be a stressful thing.*

Similarly, interview participants who were classified as being medium on BIS suggested that it is important to *Meet Others* during community service participation.

Mark: *I would say meet everybody and talk to everybody...If you can. And get to know everybody.*

Katherine: *...and make new friends while you're there.*

An advice category suggested by interview participants who were classified as being relatively high on BAS was *Persistence*. Interview participants encouraged persistence by suggesting that youth stay with an activity for a while before looking for something else in which they think they may be better suited.

Katherine: *...just keep at it...*

Rebecca: *If at first you don't like it stick it out for a little bit...*

After examination of the responses and the interview participants' coded BIS and BAS scores, it was discovered that the majority of the advice categories were important for participants regardless of their motivational system orientation. Interview participants reported the category *Get Informed/Get Involved* most frequently. They suggested that getting informed about community service opportunities was important for getting involved. Furthermore, the advice most often stated included simply getting out into the community and starting an activity.

Katherine: *I think if you know, someone who is shy like me it would be best you know, to get out there and do it.*

William: *So I mean you might as well give it a shot and you never know what could happen from that. You could create endless possibilities in that field or with community service but if you never try you don't know what you'll be missing. And you might regret it so you might as well try because you could always leave...if it wasn't the right thing for you. But if you never try you'll never know.*

Following the advice of getting out there and getting involved, it was suggested that youth seek out an activity they expect to enjoy or have an interest when looking for an activity in which to get involved. This category was termed *Do Something You Enjoy/Interests*.

Katherine: *...do something that you enjoy as opposed to something that you know everyone else is doing.*

Monica: *I would tell them...to go where their interests are you know like...I think it's important to go where your, where your interests are.*

In addition, interview participants advised others to *Try a Variety of Activities*, stressing the importance of experiencing multiple activities to find out what activity is best fitted to oneself.

Monica: *I would tell them to try as many different community services as they can...*

Rebecca: *Try different things...And even if then you don't like it try something else. Maybe that wasn't for you.*

One interview participant stressed using *Personal Characteristics* to benefit the self and others by matching one's own characteristics and personality strengths to activities that bring out and strengthen these characteristics.

Sarah: *I would probably say like take the attributes that you have and use them to your benefit. Like obviously you're outgoing and you like new things, and you like meeting new people. That's something great to relate to community service because that's what happens when you participate in these things. You learn new people. You take risks. You raise money. Everything like that. It's basically just doing what you already are. So yeah, I'd just basically say take what you have and use it to your potential as well as benefiting others.*

In sum, it appears that some advice categories overlap with initiating factors, such as getting involved with familiar others, seeking out activities in which youth show interest, and getting informed about available community service opportunities. Other categories, however, were found to be more distinctive of advice-giving such as trying out a variety of activities, sticking to the service activity, meeting new people, and personal characteristics that are suited to the activity. Advice categories that were found

to be important specifically to youth higher in BIS included participating with familiar others and meeting other people. An advice category that was found to be important specifically to youth higher in BAS was being persistent and sticking with the activity. Furthermore, many of the advice categories were found to be important for individuals regardless of their motivational system orientation and are as follows: going out and getting informed/involved; doing something based on enjoyment/interests; trying out a variety of activities; and matching personal characteristics to an activity that will support them. Next, I will examine the results of Hypothesis Two, in which motivational systems and two specific dimensions of the community service activity were examined in the prediction of quality of experience.

Hypothesis Two: Motivational Systems and Activity Dimensions Predicting Quality of Experience

It was hypothesized that quality of experience would be predicted by an interaction between participants' motivational system scores and activity dimensions.

BIS by Structure Predicting Positive QE

It was hypothesized that *Positive QE* would be predicted by an interaction between BIS and the activity dimension *Structure*. More specifically, a higher score on BIS in combination with a higher score on *Structure* would be associated with higher *Positive QE*. A hierarchical multiple regression was conducted to test this hypothesis. Predictors were entered in the following order: sex and BAS were entered as control variables in step one; BIS and *Structure* in step two; and an interaction between BIS and *Structure* in step three. Results for this multiple regression are presented in the upper half of Table 9.

Table 9. *Hierarchical Multiple Regression Analyses Predicting Positive Quality of Experience From Structure and Motivational System Scores.*

	β	$R^2\Delta$	df	$F\Delta$	p
<i>Behavioural Inhibition</i>					
Step One		.091	2,72	3.625	.032
Sex	.206 [†]				
BAS	.189				
Step Two		.013	2,70	.515	.599
BIS	.100				
Structure	.074				
Step Three		.010	1,69	.817	.369
BIS by Structure Interaction	.702				
<i>Behavioural Activation</i>					
Step One		.057	2,72	2.183	.120
Sex	.234				
BIS	.016				
Step Two		.048	2,70	1.857	.164
BAS	.224 [†]				
Structure	.074				
Step Three		.091	1,69	7.794	.007
BAS by Structure Interaction	-2.845				

Note. The β value shown is the value at the point in which the predictor was entered in the equation.

[†] $p < .10$; two-tailed

The overall model was not significant, $F(5, 69) = 1.796, p = .125$, accounting for only 11.5% of the variance when predicting *Positive QE* ($R = .339$). As can be seen in Table 9, only the first step was significant. Of the predictors on the first step, sex showed a trend level of significance, accounting for 4.12% of the variance ($p = .075$) of *Positive QE*, such that women were more likely to rate their quality of experience higher on *Positive QE* than were men. The second and third steps were not significant.

In summary, the results of this multiple regression did not provide support for the hypothesis of an interaction between BIS and *Structure* predicting *Positive QE*. In addition, there was no evidence of main effects of BIS or *Structure* in predicting *Positive QE*.

BAS by Structure Predicting Positive QE

Although an interaction between BAS and *Structure* was not hypothesized, an additional analysis was conducted to explore the outcome of this interaction. Predictors were entered in the following order: BIS and sex were entered as control variables in step one; BAS and *Structure* in step two; and an interaction between BAS and *Structure* in step three. Results for this multiple regression are shown in the lower half of Table 9. The overall model was significant, $F(5, 69) = 3.355, p = .009$, accounting for 19.5 % of the variance when predicting *Positive QE* ($R = .442$). As seen in Table 9, the first and second steps were not significant. The third step, involving the interaction between BAS and *Structure* was significant, accounting for 9.1% of the variance. The BAS by *Structure* interaction was plotted in order to interpret the interaction (Figure 1). To plot the interaction lines, low BAS and low *Structure* were calculated by substituting one standard deviation below the mean into the regression equation and one standard

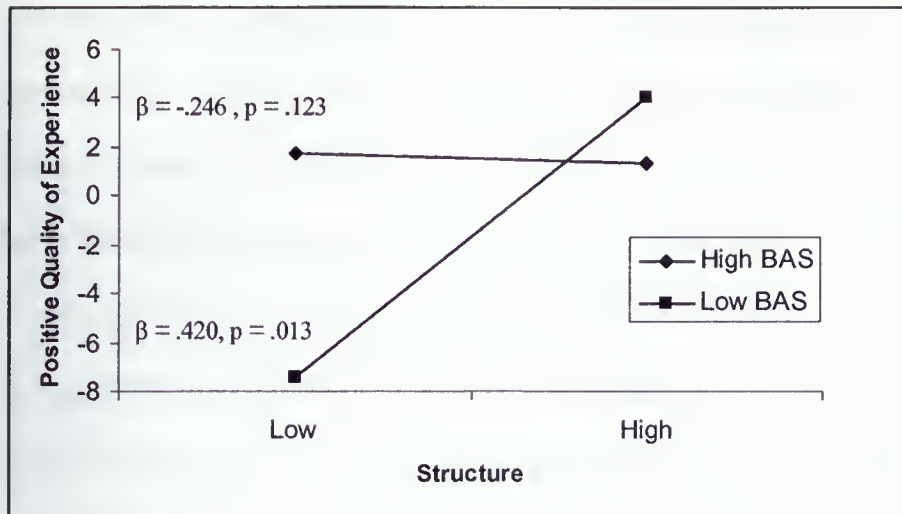


Figure 1. *BAS by Structure Interaction Predicting Positive QE*

deviation above the mean was used to calculate high BAS and high *Structure*. It appeared that *Positive QE* did not significantly differ for youth higher in BAS as a function of the level of *Structure* (i.e., high or low) in the service activity. However, lower BAS youth involved in low-*Structure* activities rated their experience lower in *Positive QE* than did lower BAS youth involved in an activity higher in *Structure*. Tests of significance of simple slopes were conducted according to the procedures outlined by Aiken and West (1991). Results of these procedures can be seen in Figure 1.

In summary, the results of this multiple regression provide support for an interaction between BAS and *Structure* when predicting *Positive QE*, such that youth lower in BAS were more likely to rate their activity as higher on *Positive QE* if the activity was higher in *Structure* than if it was lower in *Structure*.

BIS and Supportive Social Environment Predicting Positive QE

I also tested the hypothesis that *Positive QE* would be predicted by an interaction between BIS and *Supportive Social Environment*. A hierarchical multiple regression was conducted to test this interaction. Predictors were entered in the following order: sex and BAS were entered as control variables in step one, BIS and *Supportive Social Environment* in step two, and an interaction between BIS and *Supportive Social Environment* in step three. Results for this analysis are presented in the upper half of Table 10.

The overall model was significant, $F(5, 69) = 5.703, p < .001$, accounting for 29.3% of the variance when predicting *Positive QE* ($R = .541$). As seen in Table 10, the first step was significant and, of the predictors, only sex was significant at a trend level, accounting for 4.12% ($p = .075$) of the variance in *Positive QE*. Thus, young women

Table 10. *Hierarchical Multiple Regression Analyses Predicting Positive Quality of Experience From Supportive Social Environment and Motivational System Scores.*

	β	$R^2\Delta$	df	$F\Delta$	p
<i>Behavioural Inhibition</i>					
Step One		.091	2,72	3.625	.032
Sex	.206 [†]				
BAS	.189				
Step Two		.197	2,70	9.696	.000
BIS	.063				
Supportive Social Environment	.442***				
Step Three		.004	1,69	.374	.543
BIS by Supportive Social Environment Interaction	-.386				
<i>Behavioural Activation</i>					
Step One		.057	2,72	2.183	.120
Sex	.234				
BIS	.016				
Step Two		.231	2,70	11.385	.000
BAS	.141				
Supportive Social Environment	.442***				
Step Three		.000	1,69	.001	.980
BAS by Supportive Social Environment Interaction	.024				

Note. The β value shown is the value at the point in which the predictor was entered in the equation.

[†] $p < .10$; *** $p < .001$; two-tailed

were more likely to rate their activity as higher on *Positive QE* than were young men. The second step also was significant and, of the predictors, only *Supportive Social Environment* was significant, accounting for 18.9% of the variance in *Positive QE*. Participants who rated their activity as higher on *Supportive Social Environment* were more likely to have rated their quality of experience as higher in *Positive QE* than were participants who rated their activity as lower on *Supportive Social Environment*. The third step was not significant.

In summary, the results of the multiple regression did not provide support for an interaction of BIS and *Supportive Social Environment* in predicting *Positive QE*. In addition, there was no support for a main effect of BIS when predicting *Positive QE*. However, there was support for a main effect of *Supportive Social Environment* when predicting *Positive QE*.

BAS and Supportive Social Environment Predicting Positive QE

It was hypothesized that *Positive QE* would be predicted by an interaction between BAS and *Supportive Social Environment*. In particular, it was predicted that a higher score on BAS, in combination with a higher score on *Supportive Social Environment*, would be associated with higher *Positive QE*. A hierarchical multiple regression was conducted to test this hypothesis. Predictors were entered in the following order: BIS and sex were entered as control variables in step one, BAS and *Supportive Social Environment* in step two, and an interaction between BAS and *Supportive Social Environment* in step three. Results for this analysis are presented in the lower half of Table 10.

The overall model was significant, $F(5, 69) = 5.598, p < .001$, accounting for 28.8% of the variance when predicting *Positive QE* ($R = .537$). As can be seen in Table 10, the first step was not significant. The second step was significant. Of the predictors, *Supportive Social Environment* was significantly related to *Positive QE*, accounting for 18.9% of the variance in *Positive QE*. That is, participants who rated their activity as higher on *Supportive Social Environment* were more likely to have rated their quality of experience as higher in *Positive QE* than participants who rated their activity as lower on *Supportive Social Environment*. The third step was not significant.

In summary, the results of the multiple regression did not provide support for an interaction between BAS and *Supportive Social Environment* in predicting *Positive QE*. However, there was support for a main effect of *Supportive Social Environment* in predicting *Positive QE*, as shown previously.

Quality of Experience Descriptions

The research question “How are community service activities experienced by youth?”, was examined in order to understand the service activity aspects experienced when considering the dimensions *Positive* and *Stress-Challenge*. Interview participants were asked to describe the features that reflected these two quality of experience dimensions within their service activity. The qualities within the *Positive QE* dimension included *Fun*, *Good At*, *Rewarding*, and *Influence* and the qualities within the *Stress-Challenge* dimension were *Stress* and *Challenge*. The three qualities within the *Positive QE* dimension not discussed were those of *Importance to Society*, *Importance to Self*, and *Difficulty Giving Up*. The qualities within the *Positive QE* dimension will be described

first, followed by a description of the qualities within the *Stress-Challenge QE* dimension.

Positive Qualities of Experience Descriptions

Fun

Four categories emerged from the interviewees' descriptions of the aspect that they found to be the most fun within their service activity: *Spending Time with Children* (75% of interviewees); *Meeting New People* (37.5% of interviewees); *Activities During Service* (25% of interviewees); and *Being a Role Model* (12.5% of interviewees). Many of the responses centred on social interactions as the major source of fun, such as interacting with and getting to know new people.

For the majority of the interview participants, *Spending Time with Children* was the aspect from which they received the most enjoyment and satisfaction. They discussed having fun interacting with and getting to know the children, playing games and other activities with the children, and simply being surrounded by others younger than themselves.

Katherine: *I just like the fact that you know, I want to work with kids when I'm older and I thought it was a great experience, and I really enjoy working with kids. So just being there with the kids is, was really fun for me. So that was the best part.*

William: *Just being there to help like to make the kids laugh or to play with them or to do anything that would entertain them at the time.*

A second category that emerged from the interviews was having the opportunity to interact with others, termed *Meeting New People*. This category included talking to

and meeting recipients and other individuals involved in the community service activity. Furthermore, interview participants reported enjoying the opportunity to “hang out” with others who were younger than themselves, in addition to individuals their own age.

Mary: *Meeting everybody in the community... hanging out...talking to new people.*

Heather: *So a lot of them were a couple of years younger than me so it was nice to see, nice to meet kids that you know, like it reminded me of being in grade 9.*

Specific Activities During Service also were reported as being fun aspects.

Interview participants participated in multiple activities, such as singing during a karaoke event. They also enjoyed having the opportunity to just “play around” in activities that they normally did not get a chance to do.

Sarah: *Basically just all of the different activities like of course karaoke something like crazy ...people always have fun doing that and watching a band play is always fun...Like sports is fun.*

One interview participant reported that he found the opportunity of *Being a Role Model* to be a fun aspect. He reported that he enjoyed being available for the children to come to with any problems and providing help to them whenever they needed it.

William: *I think just being a good role model...It just makes you feel really good that they look up to you....And that you can be there to help out when ever they need, if they come to you with something.*

In sum, interview participants reported that having the opportunity to work with and interact with others in the community service activity was the aspect they found to be the most fun. They described the variety of social opportunities available to them, the

interesting activities in which they were involved, and the chance to share a part of themselves with others.

Good At

A second positive quality of experience dimension that was examined was the interviewees' understanding of the aspects of the activity that made them feel that they were good at doing the service activity. Four categories emerged from the interview participants' responses: *Positive Expressions from Children/Others* (50% of interviewees), *Receiving Appreciation/Praise* (50% of interviewees), *Children's Progress* (25% of interviewees), and *Personal Accomplishments* (25% of interviewees).

As discussed previously, interview participants described interacting with children as being fun and enjoyable. Moreover, they also appeared to gauge how good they were at the activity by looking at the *Positive Expressions from Children/Recipients* for evidence that the recipients were enjoying themselves in the activity. Interview participants indicated that seeing the children enjoying themselves and everyone having a good time was an indicator that they were doing a good job. Furthermore, one interview participant discussed how the children would ask about him when he was not with them and request that he come to the service activity so that they could spend time with him.

Mark: *The kids actually telling me that they were having fun. Or seeing that they were having fun.*

William: *...they would ask for me or if I was on the phone they would come out and ask if I was coming over. So I figured that they were having some sort of fun.*

Interview participants also were exposed to more formal and evaluative forms of knowing that they were good at the activity by receiving feedback from their service

supervisors and councillors. Specifically, interview participants reported receiving praise and acknowledgement from others involved in the activity, such as the parents of the children they helped. This category was termed *Receiving Appreciation/Praise*.

Mark: *And the parents, saying that they appreciated us being there...*

Katherine: *My supervisor would often “guys you are doing such a great job” you know.*

In addition, interview participants looked at the *Children’s Progress* within the activities, such as learning something new or becoming engaged with new people, as an indicator. They described the pleasure of seeing the skills that children had learned over the course of the community service activity. Moreover, one interview participant even described witnessing children’s growth and development in the social realm by discussing how children who were shy and inhibited became more willing to approach new situations soon after he began service.

Rebecca: *The actual progress you can see in the kids yourself over three weeks.*

William: *All the time when the kids were really shy to begin with they really warmed up really quickly.*

Finally, interview participants discussed the category of *Personal Accomplishments* that occurred within the service activity. For example, one interview participant was proud that she did not allow herself to get “stressed out” while being involved in the activity and that this, she reported, was how she knew that she was good at the activity. Furthermore, another interview participant described the personal fulfillment that she experienced when she reached her fundraising goal and received the amount she set out to obtain.

Sarah: *Yeah, basically just being able to obtain and receive that fifty dollars.*

Striving to get more makes you feel a lot better and makes you feel like you accomplished something.

In sum, interview participants found multiple ways to gauge how good they were at the activity in formal ways, including supervisor comments and praise from parents of recipients. They also viewed the recipients' expressions of receiving enjoyment from the activities as an indicator of how good they were at the activity.

Rewarding

The third positive quality of experience dimension was interviewees' views of the most rewarding aspects of the community service activity. Four categories emerged from interview participants' responses: *Children's Progress* (62.5% of interviewees); *Making a Difference* (37.5% of interviewees); *Seeing Children Happy* (25% of interviewees); and *Feelings of Personal Accomplishment* (12.5% of interviewees).

The interview participants discussed receiving rewarding feelings from seeing the *Children's Progress* over time. Watching children achieve personal accomplishments, such as reading or skating in a competition, were reported. In addition, interview participants indicated that they had the opportunity to learn lessons from children and to witness the children's unexpected capabilities. Furthermore, seeing children retain information and learn material while still having fun also was stated as being rewarding for the interview participants.

Katherine: *...seeing smiles on their faces when they can finally read one page from a book or whatever...*

William: *...and that they said "thank you" at such a young age when they can't even talk...It's just, it's very rewarding.*

A second category reported as being rewarding was the feelings of *Making a Difference* that the interviewees received from helping recipients and their community. Within this category, interview participants described the opportunity of witnessing where their helping efforts were being directed and the positive outcomes that resulted from their participation. Furthermore, interview participants indicated that contributing to the enjoyment of recipients' lives and bettering their communities was rewarding.

Sarah: *Basically just seeing exactly like in front of your eyes what you're raising the money for rather than just hearing about it, that's the most rewarding thing I think.*

Mary: *The fact that I knew that I was helping out the community and contributing to peoples' enjoyment of life.*

The third category, *Seeing Children Happy*, was similar to the indicator used to determine how good participants were at doing the activity. Interview participants described seeing children smiling and having a good time as a rewarding aspect of the activity.

Heather: *That everyone seemed to have a good time...*

William: *I think just seeing the looks on their faces when I would do something funny or...*

The final category that emerged was *Feelings of Personal Accomplishment*, reported by one interview participant. She described feeling good after participating in the activity and pleased that the program ran smoothly.

Heather: *...it ran smoothly and... I don't know I felt good after doing it.*

In sum, interview participants reported feelings of reward when viewing children's progress and enjoyment experienced within the activities. Furthermore, feelings of making a difference in their communities and with recipients, along with accomplishing personal goals, also were discussed.

Influence

The final positive quality of experience reported by the interview participants was the aspects in which they felt they had the most influence in their community service activity. Three categories emerged from the descriptions of areas of influence within their activities: *Planning and Organization* (37.5% of interviewees); *Activity Direction* (37.5% of interviewees); and *Lack of Influence* (25% of interviewees).

Interview participants described having a great amount of influence in the *Planning and Organization* of programs and activities. They were responsible for planning what they taught the children and the activities in which the children participated. In addition, interview participants were involved in the organization and delivery of the programs. Furthermore, one interview participant reported being responsible for helping the other youth leaders in program delivery and solving problems.

Monica: *Yeah, probably mostly with the leaders just because I helped them out with everything that they were dealing with so...*

Heather: *Because I like planned, we planned out activities for them to do. So I mostly, mostly had the most influence on that I guess. The organization of it.*

A second category, *Activity Direction*, also involved interview participants being responsible for the delivery and direction of the activities. However, emphasis was placed

on having choices within the activity, rather than planning and organizing the day's events. Interviewees described having control over the interactions with the recipients, such as deciding what was discussed during the activity. Also, interview participants were in charge of specific aspects of the activity, such as helping children with meals and getting them ready for bed, which could be done how the interviewees wanted and on their own schedule. Finally, one interview participant described having an influence over deciding how much money she contributed to a fundraising event.

Mark: *Day-to-day I pretty much had control over what was talked about, what was taught, everything like that.*

Rebecca: *The most influence, I would say is meal times and bed times. Just because you're left to do things on your own schedule. Or however you want it done.*

Within the last category, interview participants discussed the *Lack of Influence* that they experienced in the activity and described the ways that they simply went along with whatever anyone wanted them to do or needed to be done. It appeared that they did not have much choice in the duties that they performed, but rather were present to help the group members in any way they could.

Mary: *No I just went along with... like I...the group was made up of mostly older people so I was just there to take the minutes and help out with whatever they couldn't do.*

William: *When other people are busy with the other kids I would just do whatever I can to keep the other ones occupied and maybe out of trouble. So I think it was basically just being there as a helping hand.*

In sum, many of the interview participants were directly involved in and responsible for the planning and implementation of activities directed toward the recipients. However, I also found interview participants who did not share in the organization of the program or activities but rather were there to complete tasks that were requested of them.

An examination of the descriptions of positive qualities of experience as a whole leads to a better understanding of the various dimensions that are included within the *Positive QE* dimension. It is evident from the qualitative descriptions that although the service activities in which the interviewees participated were different, the aspects reflected by each quality overlapped. In general, the *Positive QE* dimension included opportunities to witness children's learning and development, receive appreciation and praise from others, meet and interact with new people, and experience personal accomplishments, such as leadership abilities, feelings of satisfaction from making a difference in the lives of others, and learning about unexplored skills and abilities. In the next section, the qualities that comprise the *Stress-Challenge* dimension will be examined to understand how individuals experience these aspects within community service.

Stress-Challenge Qualities of Experience Descriptions

Stressful

Five categories of the stressful quality emerged from the interviewees' responses: *Preparation for Activities* (50% of interviewees); *Working with Children* (25% of interviewees); *Seeking Funding* (12.5% of interviewees); *Hardships of Others* (12.5% of interviewees); and *No Stress* (12.5% of interviewees).

The category most frequently reported by interview participants was *Preparation for Activities*. They described the stress they experienced before the delivery of activities, such as making sure that everything was in order or worrying that events would not be executed smoothly. In addition, one interviewee discussed having to plan and prepare material for her activity, while at the same time balancing employment and service involvement.

Heather: *Well at the beginning it was always stressful to make sure I had everything in order. I was scared I was going to go there and things were going to fall apart...*

Monica: *Having to work and planning everything during the week, and making sure that everything was ready in the morning...like craft material and snacks.*

The experience of *Working with Children* has been previously described as fun and rewarding; however, interview participants also portrayed these interactions as stressful. One interview participant described her frustrations related to people arriving late and disrupting the activity once it had started. Another interview participant discussed the difficulties that she experienced while trying to help children who did not want to learn required material.

Katherine: *Probably just, you know, getting frustrated with the kids and wanting to teach them but them not wanting to learn and, you know, just trying to get past that barrier.*

Individual interview participants experienced several unique categories. One interview participant described the stress that she experienced within the category

Seeking Funding. She reported that because the service activity ran the full length of the summer, it prevented her from earning money to contribute to school fees.

Rebecca: *The most stressful aspects I would say is because it is volunteer...Is figuring out other ways of getting funding for school.*

Another category, specific to one interview participant, was attempting to understand the *Hardships of Others*. She described the stress that she experienced when witnessing footage of poverty-stricken individuals whom the fundraising event, in which she was involved, aided. She reported that the circumstances that she witnessed were heartbreaking and difficult to understand, but that she was glad to be able to help provide resources for these individuals.

Sarah: *Again, just in another aspect like looking at why we're doing this, it's just stressful knowing that there are countries that are not striving like we are and they're lacking the resources needed to live. That's probably the most stress building and heartbreaking thing to know.*

Unlike other interview participants in the study, one interviewee reported that he did not experience any stressful aspects within his community service activity. He described his activity as being lenient and not having any major aspects in which he was responsible (*No Stress* category).

William: *I don't have any stresses. Like I don't even have any big responsibilities. But there's nothing that ever stresses me there which is basically the reason why I would continue doing it. Because there's nothing wrong with it.*

In sum, interview participants experienced multiple aspects that they considered stressful. The overall planning and execution of activities was reported as the most

worrisome. In addition, the difficulties associated with working with children were discussed. Furthermore, individual stresses, such as tensions around paying school tuition and witnessing the hardships experienced by the less fortunate, also were reported. Finally, one interviewee described the activity in which he participated as not having any stressful components.

Challenging

Challenge is a quality of experience related to, but not identical with, *Stress*. Five categories of the challenge quality emerged from the interviewees' descriptions of their service experience: *Working with Children* (37.5% of interviewees); *Planning Problems* (25% of interviewees); *Time Management* (25% of interviewees); *Fit Between Volunteer and Recipient* (12.5% of interviewees); and *Not Eating* (12.5% of interviewees).

Interviewees described the category *Working with Children* as challenging, as well as stressful, and discussed the ways in which activities could become frustrating when the children chose to do something else, such as not wanting to focus on learning material, rather than what the interviewees planned to do with them.

Katherine: *I guess it can get, it can get a little frustrating every now and then, you know when the kids don't want to do what you want to do.*

One interview participant described her experience working with children as "emotionally tiring" because she was exposed to unanticipated personal problems of the children, in addition to dealing with the everyday program planning and organization. Furthermore, finding ways to help the children accept new people also was described. Moreover, monitoring and adjusting behaviour and speaking style to match the children's developmental level were found to be challenging for one interviewee.

William: *But just kind of dealing with kids you have to change the way you talk. The way you act and the things you say or do around the house. I mean... it's kind of not like being a second person but just trying to get down to their level but still be mature and responsible at the same time.*

A second category that emerged from the interviews was experiencing and attempting to overcome *Planning Problems* within the activity. Interview participants described the importance of staying calm and in control even when things went wrong or did not run as smoothly as expected.

Mary: *Keeping everything together. Keeping your cool when things don't go right.*

Moreover, interview participants reported that *Time Management* proved to be challenging. One interviewee discussed the challenge of having to balance her time between service involvement and employment. She mentioned that having no time in between her two engagements, along with needing to work late into the night, was a challenge. In addition, having to contribute a greater amount of hours than was first expected, yet not receiving recognition for the extra involvement, was described as challenging.

Monica: *So I would volunteer in the morning and then at night, or from 2 to 5 or whatever I would have to work. So, it was really stressful to have no time in between. So, that was probably the most challenging.*

Another category that emerged, as described by one interviewee, was experiencing the challenge of finding a *Fit Between Volunteer and Recipient*. He discussed the difficulty of finding a match with a recipient who fit his personality

characteristics, stating that he worked with several recipients before finding one who really worked well with him.

Mark: *The most challenging would be being paired up with the right kind of person for your personality. So finding the right special needs kid to work with your personality.*

The final category that emerged, *Not Eating*, was related to the service activity's purpose, which was raising money by giving up food for 12 hours. The interview participant described the need to focus her attention on other activities to take her mind off not consuming food.

Sarah: *Probably the not eating part. I don't know, I guess you could probably have like, up until the part where we went and had bread and water that's the only thing that we ate so...that's probably the most challenging thing.*

In sum, interview participants sometimes experienced circumstances that taxed their abilities to complete tasks efficiently. They were required to find novel ways to help children progress and learn what was required and remedy situations that went awry. Moreover, practices of time management and advanced planning were required in order to accomplish everything that they set out to do.

Upon examination of the two qualities that comprise the *Stress-Challenge QE* dimension, it was evident that both similar and distinctive categories emerged. Similar experiences included planning, preparing for activities and events in which the participants were responsible, and helping children to have fun and learn. Distinctive experiences emerged between the qualities, such as balancing responsibilities between

activities and establishing a good match between volunteer and recipient (described as challenging) or witnessing the hardships of others (indicated as stressful).

As mentioned previously, being able to understand participants' real-life community service episodes and their qualities of experience is valuable in appreciating the realities faced in participating. Moreover, although interview participants did describe aspects unique to their community service activity, many of the aspects that were discussed overlapped. Thus, even though service activities may differ in many ways, it is apparent that they may be characterized by similar qualities of experience.

Hypothesis Three: Stress-Challenge QE as a Mediator Between BIS and Future Service Intention

Stress-Challenge QE was predicted to be a mediator between BIS scores and future intention to participate in service. Specifically, it was predicted that BIS would be positively associated with *Stress-Challenge QE* and *Stress-Challenge QE* would be negatively associated with future intention to participate in service.

To test the mediational model, I conducted multiple regressions following the procedure outlined by Baron and Kenny (1986). To establish mediation, three conditions must be met. First, a significant relationship must exist between the independent variable and the mediating variable. Second, a significant relationship must exist between the independent variable and the dependent variable. Finally, a significant relationship must exist between the mediating variable and the dependent variable, and the relationship between the independent and dependent variable must be smaller after controlling for the mediating variable.

Therefore, to test the mediational model in Hypothesis 3, in the first step, a significant relationship must exist between BIS score and *Stress-Challenge QE*. A hierarchical multiple regression was conducted to test this relationship. Using *Stress-Challenge QE* as the criterion, sex and BAS were entered as control variables in step one and in step two BIS was entered.

The overall model was not significant, $F(3, 71) = 1.047, p = .377$, accounting for only 4.2% of the variance when predicting *Stress-Challenge QE* ($R = .206$). As can be seen in Table 11, neither step one nor step two were significant. Because the first condition in the mediational model was not met, no further testing of the model was conducted.

Table 11. *Hierarchical Multiple Regression Analysis Predicting Stress-Challenge Quality of Experience From BIS.*

	β	$R^2\Delta$	df	$F\Delta$	p
Step One		.010	2,72	.376	.688
Sex	.093				
BAS	.028				
Step Two		.032	1,71	2.375	.128
BIS	.201				

Note. The β value shown here is the value at the point at which the predictor was entered in the equation.

Hypothesis Four: Positive QE as a Mediator Between BAS and Future Service Intention

Positive QE was predicted to be a mediator between BAS scores and future intention to participate. Specifically, BAS was expected to be positively associated with

Positive QE and *Positive QE* would be positively associated with future intention to participate in service.

The first step to establish mediation was repeated in this hypothesis. That is, a significant relationship must exist between BAS scores and *Positive QE*. A hierarchical multiple regression was conducted to test this relationship. Using *Positive QE* as the criterion, BIS and sex were entered as control variables in step one and BAS in step two.

The overall model was significant at a trend level, $F(3, 71) = 2.605, p = .058$, accounting for 9.9% of the variance when predicting *Positive QE* ($R = .315$). As can be seen in Table 12, the first step was not significant.

Table 12. Hierarchical Multiple Regression Analyses Predicting Positive Quality of Experience and Future Intention From BAS.

	β	$R^2\Delta$	df	$F\Delta$	p
<i>First Step: Positive QE</i>					
Step One		.057	2,72	2.183	.120
BIS	.016				
Sex	.234				
Step Two		.042	1,71	3.310	.073
BAS	.223				
<i>Second Step: Future Intention</i>					
Step One		.041	2,72	1.527	.224
BIS	.141				
Sex	.108				
Step Two		.000	1,71	.006	.937
BAS	.010				

Note. The β value shown is the value at the point in which the predictor was entered in the equation.

However, BAS was significant at a trend level, accounting for 4.2% of the variance when predicting *Positive QE*. The second condition was then tested because the first step to establish mediation was satisfied at trend level.

In the second step to establish mediation, a significant relationship must exist between BAS scores and *Future Intention* to participate in community service. A hierarchical multiple regression analysis was conducted to test this relationship. Using *Future Intention* as the criterion, BIS and sex were entered as control variables in step one of the regression and BAS was entered in step two.

The overall model was not significant, $F(3, 71) = 1.006, p = .395$, accounting for only 4.1% of the variance when predicting *Future Intention* ($R = .202$). As seen in Table 12, neither the first nor second steps of the regression were significant. The requirements of the second step to establish mediation were not met, thus, no further testing of the model was conducted.

In sum, there was no evidence that *Stress-Challenge QE* mediated the relationship between BIS and *Future Intention* to participate in community service. In addition, there was no evidence that *Positive QE* mediated the relationship between BAS and *Future Intention* to participate in community service.

DISCUSSION

Community service participation is a valuable component of citizenship and is likely to continue into adulthood if started during youth (Youniss & Yates, 1997). In recent years, research has focused on youth and positive outcomes related to service participation (e.g., Hamilton & Fenzel, 1988; Youniss & Yates, 1997). However, research on the quality of youth service participation and motivational systems had yet to be examined. Thus, one goal of the present study was to examine how two motivational systems (related to approach and avoidance) were associated with several initiating and sustaining factors of community service to determine whether different strategies need to be used to attract youth to community service. Furthermore, as not all work environments are comparable, community service activities also differ in activity dimensions. As discussed within Buss and Plomin's (1984) concept "goodness of fit" and Clary and Snyder's (1999) "matching hypothesis" research, particular types of individuals may excel better in certain kinds of environments. Therefore, the second goal of the present study was to examine whether a match between motivational systems scores and service activity dimensions was important in predicting positive quality of experience. The final goal was to examine the relation between qualities of youths' service experiences and future service intention. In the next few pages, the results of this study will be summarized and discussed.

Motivational Systems and their Relation to Initiating and Sustaining Factors

The first goal of the study was to examine the BIS and BAS motivational systems in relation to initiating and sustaining factors of community service involvement. Six initiating and eight sustaining a priori factors were assessed quantitatively and seven

initiating and eight sustaining categories emerged from the qualitative data. Numerous quantitative and qualitative initiating and sustaining factors overlapped, suggesting that many of the factors examined quantitatively also were important to the interview participants when discussing ways to get and stay involved. However, some factors were unique to the qualitative data, which suggests that aspects not assessed within the questionnaire also were important to the interviewees. Although many categories emerged from the qualitative data, in order to discuss common experiences between interviewees only categories mentioned by more than one participant will be presented.

Initiating Factors and Suggestions for Community Service Involvement

Peer and Parent Community Service Involvement

Both peers and parents are influential in helping youth to get involved in community service (da Silva et al., 2004; Janoski & Wilson, 1995; McLellan & Youniss, 2003). In the present study, having friends involved, along with participating with familiar others, were important factors for individuals higher in BIS. However, because significance was only at trend level between BIS and *Friends Involved*, the findings and recommendations pertaining to this factor should be interpreted with caution. It is evident from both the quantitative and qualitative findings that peers play an important role in becoming involved in community service with other youth. It makes sense that becoming involved with friends is related more to the BIS dimension than to the BAS dimension because having familiar others involved might help the youth feel comfortable and less anxious when encountering new situations and people.

Surprisingly, however, neither BIS nor BAS was significantly related to the factor *Parents Involved* and interview participants did not mention parents as an initiating

factor. One possible reason why parents did not appear to be as influential in helping youth to get involved as did peers is that, for many of the youth, community service was mandated by the school. Therefore, peers may have been more likely to help the youth become involved within the school setting than parents. Furthermore, in previous studies in which parents were found to be important (e.g., Janoski & Wilson, 1995), voluntary community service was usually the primary service examined. Therefore, it is possible that by combining the voluntary and mandatory community service activities in the current study, the influence of parents' involvement on youth could not be detected.

From the current findings, therefore, it appears that encouraging higher BIS youth to participate with a friend would promote involvement. It is important that future research examine whether the initiating influence of peers and parents differs between voluntary and mandatory community service activities.

Believing in a Cause

Both BIS and BAS were related to the quantitative initiating factor *Belief in a Cause* of the community service activity. In the words of one participant, it is possible that "*finding something you are passionate about*" would help all youth, regardless of motivational system orientation, to get involved. Activities that appeal to youth by connecting them to something relevant and important to their lives also may help them to get involved. Certain causes relevant to youth might include those that support decreasing youth violence or teen smoking. Other causes, such as cancer prevention or supporting Alzheimer's disease, may not be viewed by youth as central to their lives. Therefore, it would be important for organizations that are interested in recruiting youth to advertise specifically to the interests of youth, as well as in familiar locations such as schools.

Moreover, encouraging older volunteers (e.g., parents of youth) to introduce younger participants into the organization also may be useful. However, because significance was only at trend level between the motivational systems and this factor, the findings and recommendations pertaining to this factor should be interpreted with caution.

Options in the Community

In the present study, the initiating factor *Options in the Community* was important for individuals higher in BAS. Individuals higher in BAS are more likely to seek out new activities and experiences (Carver & White, 1994). Thus, they also may be more likely to seek out and take hold of the opportunities that are available within their communities than are youth lower in BAS. Qualitative findings also suggested that making information about service opportunities more accessible in the community would help youth higher in BAS to become informed of the availability of service positions. Likewise, interview participants, regardless of their motivational system orientation, suggested that getting informed and involved was sound advice for youth deciding whether to participate in service. This is an important consideration for recruitment. That is, simply making information available to youth should help them to get involved.

Expectations of Enjoyment

Although only one interview participant reported her expectations for enjoyment of the activity, interview participants, regardless of their motivational system orientation, did suggest that doing service activities that youth enjoy was sound advice for youth deciding to participate in community service. It is possible, then, that youth did not become involved themselves because they expected to enjoy the activity but that, as an afterthought, they suggested this for others. Therefore, it appears that it would be

important for service agencies to inform youth of the duties and tasks available within the service activity in hopes of enticing them to become involved.

Using Skills and Knowledge

The suggestion of doing something in which youth are interested was reported as sound advice for youth deciding to get involved. Again, it may be important for service agencies to outline a variety of tasks available within the activity in order to attract youth.

Familiar/Comfortable Environment

Interview participants higher in BIS reported that being in an environment that was familiar and in which they felt comfortable was an important initiating factor. This idea reflects the BIS characteristic of sensitivity to novelty, in which higher BIS individuals are less likely to feel anxious and nervous in an environment to which they have been previously exposed than in novel settings (Carver & White, 1994). Thus, it seems that community service activities performed in a familiar environment (e.g., school setting) would encourage higher BIS youth to become involved.

Meet Others

Interview participants, who were classified as being higher on BIS, reported the advice of trying to meet and get to know other people for youth deciding whether to get involved. Although individuals higher in BIS are characterized as being higher on avoidance than on approach, it is possible that they find the support they receive from meeting others similar to themselves as valuable. Therefore, service agencies should consider providing opportunities for youth to meet and get to know others in a comfortable and non-threatening environment.

Persistence

Interview participants, who were classified as being higher on BAS, reported the advice of being persistent for youth deciding to become involved. It is possible that these participants found that they themselves at first felt like leaving an activity but that once they learned more about the activity and persisted, they decided to stay involved.

Try a Variety of Activities

In addition, interview participants, regardless of their motivational system orientation, advised youth to sample a whole host of community service activities. These participants emphasized the importance of experiencing multiple activities in order to discover which activities are best fitted to themselves. This suggestion for involvement reflects Erikson's (1968) notion of trying out new roles and experiences during adolescence. While trying different service activities, it is likely that youth are exposed to adults and other youth who model norms and values of a particular cause (Youniss & Yates, 1997). This exposure, as mentioned previously, is important to identity development in both the moral and civic realm (Youniss et al., 1997; Youniss & Yates, 1997). Thus, it is reasonable to believe that service agencies that encourage youth to participate in a variety of experiences or collaborate with other agencies to promote a type of "cross-participation" would help youth to establish a stronger sense of civic identity, which is likely to support civic participation during their adult years.

Sustaining Factors for Community Service Involvement

In addition to promoting community service participation, it also is crucial to maximize the likelihood of retaining participants once they are involved. In the present study, it was found that some factors that helped youth to initiate involvement, such as

participating with familiar others, also are important for sustaining involvement, whereas other factors were found to be exclusive to helping youth stay involved.

Social Support from Family, Friends, and Community Service Others

Similar to previous research findings (e.g., Janoski & Wilson, 1995; McLellan & Youniss, 2003), family and friends were reported to help youth to stay involved in community service. One reason is that these individuals provide support to involved youth (Pancer & Pratt, 1999). In the present study, receiving support from family and friends in order to help youth sustain involvement was important for individuals higher in BAS. It is possible that higher BAS youth enjoy discussing their activity involvement with others and that receiving support and encouragement from their friends and family members is fulfilling to them, compared to their lower BAS counterparts. However, it is surprising that BIS also was not related to this factor. Based on the characteristics that define the BIS motivational system, higher BIS individuals also would be expected to need support from familiar others to help them sustain involvement. As mentioned above, higher BAS youth may be more likely to discuss their activities with others than higher BIS youth and therefore receive more support regarding their service involvement. It is possible that this may be a function of overall frequency of interaction and willingness, on the part of higher BAS youth, to discuss problems.

Acknowledgements from Others

In the present study, I found that receiving recognition for duties performed also was important for sustaining activity involvement for interview participants higher in BAS. Consistent with Pancer and Pratt's (1999) finding of being appreciated by others in the service activity, the finding in the current study also corresponds to the BAS

characteristic of sensitivity to reward (Carver & White, 1994). Thus, the appreciation and praise received by others involved in the community service activity could be considered rewarding to these youth and may therefore encourage them to stay involved in the activity. This finding helps to elucidate why social support may be more important in BAS than BIS.

Receiving support from others, more specifically from those in authority, is important to help youth higher in BIS to sustain community service involvement. That is, BIS, not BAS, was significantly related to receiving support from the activity supervisor as a sustaining factor. It is possible that something specific about supervisor feedback, not present in other support, is important for youth higher in BIS. Specifically, the support and encouragement provided by the site supervisor may help to reassure higher BIS youth about the jobs they are doing and decrease uncertainty, and thus anxiety, about their duties and what is expected of them.

It appears, then, that receiving support from family and friends was important for youth higher in BAS. This is a relevant factor for service agencies to promote. Although in some situations it may be necessary for information to be kept confidential, youth should be encouraged to discuss certain topics with others. For example, Foster and Meinhard (2000) found that having the opportunity to discuss experiences with family was an important feedback opportunity for youth and was related to outcomes such as engagement in service and service experience. Thus, it is important that future research examine whether discussion with others, if encouraged by the agency, would help higher BIS youth to stay involved.

In summary, it was found that receiving appreciation and praise from individuals

within the service activity was important for youth higher in BAS and receiving support from the site supervisor was important for youth higher in BIS. Therefore, if service agencies wish to retain their community youth participants it appears to be important for those agencies to provide support and encouragement to all youth, regardless of their motivational system orientation. Evidence for the importance of a supportive social environment also was found in the hierarchical multiple regressions predicting positive quality of experience and will be discussed further within the next few pages.

Enjoyment of Working Toward Goals

A sustaining factor that was important for individuals high in either motivational system was enjoyment of working toward goals in the service activity. Thus, it would be valuable for service agencies to work with youth in planning goals and supporting the youth throughout the process in order to help them to achieve what they set out to accomplish. However, because significance was only at trend level between the BIS and this factor, the findings and recommendations pertaining to this factor should be interpreted with caution.

Making a Difference

In previous research, feelings of making a difference or contributing have been found to be important to sustaining involvement (Foster & Meinhard, 2000; Pancer & Pratt, 1999). In the present study, feelings of making a difference within the service activity were found to be important to individuals higher in BAS, in both the quantitative and qualitative data. It is possible that the feelings experienced when making a difference are found to be more rewarding to higher BAS youth than their lower BAS counterparts. Thus, in order to help promote sustained participation for higher BAS youth, it may be

important for service agencies to provide various tasks so that youth are able to choose duties that are best suited to their purpose for becoming involved. For example, higher BAS youth may enjoy activities that give them the opportunity to make a difference, such as helping tutor a child rather than photocopying. The rewards of feeling that involvement makes a difference may be more tangible in the first example and thus promote sustained involvement. It is possible that youth higher in BIS are not as motivated to stay involved from feelings derived from the experience of making a difference than BAS-oriented individuals. However, further research needs to be conducted to explore this difference in detail.

Comfort Level of Participation

In the present study, higher BIS youth were somewhat more likely to sustain involvement if tasks were more focused, rather than if they performed a variety of new tasks. This finding may reflect the characteristic of sensitivity to novelty, in that higher BIS youth are more likely to experience greater feelings of competence and lower feelings of anxiety when performing one task over time than when participating in several duties in which they may not have had time to become comfortable. However, because significance was only at trend level between BIS and this factor, the findings and recommendations pertaining to this factor should be interpreted with caution.

Within the qualitative data, higher BIS interview participants reported the importance of feeling comfortable within the activity as a sustaining factor. It is surprising, however, that BIS was not significantly related to the quantitative factor *Felt Comfortable Doing Activity*. It is likely that, for higher BIS youth, feeling comfortable doing the activity is important, as reported qualitatively; however, this was not a factor

that was significantly present across the entire group of participants. It is possible that the interviewees' responses for this variable simply did not reflect the sample's response on the quantitative question. Also, higher BIS youth in the study's sample may have not believed that feeling comfortable was a reason they sustained involvement; however, upon reflection interviewees did come to consider this factor to be important for others.

Social Interactions with Community Service Others

Several sustaining factors were found to be important for participants, regardless of their level on either motivational system. The factor of meeting new people and making new friends was important to help youth stay involved. Meeting new people might primarily be characteristic of higher BAS individuals, relating to the likelihood that they tend to enjoy new situations and are extroverted in nature. However, higher BIS individuals also may enjoy making friends but for different reasons than those higher in BAS. Higher BIS youth may report meeting others as important because meeting individuals similar to oneself and making new friends who have common interests may make them feel more comfortable and, therefore, increase their desire to stay involved.

Similarly, participating with familiar others also was reported by interview participants as a motivator to stay involved. Again, this factor may have different meanings for each motivational system. For example, higher BAS youth may enjoy the opportunity to interact with others because of their more sociable nature, whereas higher BIS youth may extract support from these peers, which may help buffer the negative feelings related to unfamiliar situations.

Metz et al. (2003) found that social exposure to others was important for positive outcomes. Similarly, in the present study it appears that having the opportunity to interact

with others in the community service environment is important to help youth sustain involvement. Therefore, it would be beneficial for service agencies to provide opportunities for youth to participate with friends, along with promoting social interaction by allowing youth to work with others while performing tasks.

Positive Experiences

Having positive experiences within the service activity was important to participants, regardless of their motivational system level. It is evident that experiencing positive interactions with others and the environment, along with having nonsocial things going well, is important for sustaining participation in youth. Therefore, this atmosphere should be encouraged within the community service environment.

Positive Qualities of Experience

The interview participants discussed specific aspects of their service experiences that reflected four positive qualities of experience (i.e., *Fun*, *Good At*, *Rewarding*, and *Influence*). Although the interviewees' experiences differed regarding the duties they performed, recipients they helped, and number of hours engaged in the activity, the aspects of the qualities that they experienced appeared to overlap across participants and activities. Three general themes emerged from the qualitative data: 1) witnessing the progress and growth experienced by the children; 2) personal accomplishments and opportunities for personal growth experienced by the interviewees; and 3) social interactions and the positive feelings that accompanied these interactions.

The interview participants had many positive experiences within their community service activities. Furthermore, it appears that the environment in which the activity took place played an important role in contributing to these positive aspects. I will now discuss

the hypotheses proposed in the present study predicting *Positive QE* from participants' motivational system orientation and the activity dimensions of *Structure* and *Supportive Social Environment*.

Motivational System-Activity Dimension Match

As discussed previously, individuals are more likely to excel in situations if the environment matches their personal characteristics, such as temperament dimensions or personal motivations for getting involved (Buss & Plomin, 1984; Chartrand, 1991; Clary & Snyder, 1999; Gati, 1998). In the present study, I believed that this proposed "match" between personal and environmental characteristics would be important in predicting youths' quality of experience within a community service activity. The two activity dimensions of *Structure* and *Supportive Social Environment* were examined in combination with the youths' motivational system scores to determine whether a match between these components would be important to the quality of experience. I proposed that a higher score on *Structure* in combination with higher BIS scores would be associated with higher *Positive QE*. However, no support for the interaction between BIS and *Structure* was found. It is possible that *Structure* was not an important activity dimension for those individuals higher on BIS. Youth higher in BIS may prefer to be involved in activities that do not require the elements of structure (e.g., meeting at regular times) in order to be able to become comfortable and acquainted with the activity at their own pace.

In a post hoc analysis, I found no relation between *Structure* and *Positive QE* for individuals relatively high on BAS; however, a positive correlation between *Structure* and *Positive QE* for youth relatively low on BAS was present. Therefore, it appears that

more *Structure* is important to individuals low on BAS. In order to help youth enjoy their community service experiences, it is recommended that youth be given a choice in the level of structure that they may desire in the activity (e.g., deciding to participate at regular times). However, future research is required to give support for this recommendation.

From both the quantitative results and the qualitative findings it appears that participating in a community service environment in which participants have the opportunity to interact socially with others, along with receiving support and encouragement (i.e., *Supportive Social Environment*), helps contribute to an overall positive experience. This issue is important for service agencies to consider when designing tasks for youth. For example, although a task may be repetitive (e.g., stuffing envelopes), it may result in a positive experience if associated with social interaction and receiving acknowledgment for youths' efforts. Although it is necessary for future research to confirm these findings, it appears that participating in a supportive social environment is beneficial for youth participation in multiple ways.

In one of the two mediational models hypothesized in the study, *Positive QE* was predicted to mediate the relationship between BAS and future intention to participate in community service. Although no support for the model was found, BAS was found to be positive at a trend level in predicting *Positive QE*. Past research has indicated that individuals higher on BAS are more likely to be higher on positive affect than their lower BAS counterparts (Carver & White, 1994; Gable et al., 2000; Jorm et al., 1999). Therefore, one possible reason why individuals higher on BAS were more likely to rate their community service activity as higher on *Positive QE* is because they are more likely

to be in a positive mood. That is, although these individuals higher on BAS may have had experiences similar to, or even less positive than low-BAS youth, they may simply be more apt to see situations in a more positive light. Furthermore, BAS has been found to be related to novelty seeking (Caseras et al., 2003) and activity level (Carver, 2004). Therefore, another possible reason why higher BAS youth may rate their experiences more positively is that they have had more opportunity to try out several activities before settling on one that they find enjoyable. Thus, they were more able to seek out opportunities and stay involved in those activities that they found to be satisfying.

Stress Challenge Qualities of Experience

In addition to describing aspects related to positive qualities of experience, interview participants also were asked to discuss aspects that they found to be stressful or challenging within their community service activity. They reported that certain community service activities may produce more stress, depending on the expected responsibilities. However, not all aspects that were found to be challenging also were reported as stressful. Similar to Csikszentmihalyi and LeFevre's (1989) work on flow theory, challenges are an important aspect of an activity to prevent feelings of boredom and are not necessarily equivalent to negative feelings, such as stress.

Methodological Considerations

Self-Selected Sample

Because the questionnaire was voluntary and could be used toward completion of a course assignment, certain types of participants could have selected themselves into the study, such as youth who are interested in community service activities or those higher on approach. However, there was variability in the behavioural inhibition and activation

measure, suggesting that a range of participants were recruited and not simply high-approach youth. Nevertheless, the size of the sample was small and thus limited the generalizability and statistical power.

Participants who participated in the interview component also could have shown greater interest and involvement in community service and therefore wanted to share this information more than their less-active counterparts in the overall sample. Wilson (2005) termed individuals who participated in community service, not for a specific motivation but rather because it was how they lived their lives, as “career volunteers”. It was found that these individuals may continue service even when they are dissatisfied with their experience (Wilson, 2005). Therefore, in the present study, qualitative findings may not be representative of all participants in the sample.

In addition, another reason why both survey and interview participants may differ from other youth who are involved in community service is because they were university psychology students (Wilson, 2005). For example, Youniss, McLellan, Su, and Mazer (2001) found that the type of youth’s peer group was related to his/her choice of community service activities. Specifically, youth involved in school activities were more likely to participate in social-service community service and less likely not to do service (Youniss et al., 2001). Therefore, the current sample of youth may have had different service experiences than youth not engaged in a university environment. Future research should examine youth within various post-secondary situations (e.g., university students, college students, part-time employed students) and youth not in school to determine whether these groups differ in experiences within community service and have unique initiating and sustaining factors in order to effectively develop recruitment strategies.

Direction of Causality

In the present study, research was correlational in nature and therefore causation cannot be inferred. For example, it was found that having a *Supportive Social Environment* predicted *Positive QE*. However, it also is possible that having more positive experiences within the community service activity will lead youth to initiate more social interaction with each other and the recipients. Longitudinal studies will help sort out the direction of the relationships found in the present study.

Method of Measurement

Multiple Levels of Analysis

Wilson (2005) noted that a weakness of social research is that it focuses solely on the individual without taking into account other areas that influence the individual's behaviour and circumstances. Therefore, a strength of the present study is that initiating and sustaining factors were assessed with consideration of the system, social, and individual levels of community service. This allowed me to examine ways that youth get and stay involved in service from all three levels, helping to further aid the understanding of how these factors interact and influence youth service participation.

Questionnaire

Several strengths are apparent in the current study's questionnaire. Six items relating to initiating factors and 8 items relating to sustaining factors were used to assess youths' reasons for becoming and staying involved in community service activities. By devising items that reflected findings important in the service literature, I was able to replicate some of the factors that have been previously found in research for youth service participation.

Moreover, each of the motivational systems was controlled when examining the other, because BIS and BAS were significantly and negatively related. This allowed us to examine the unique variance accounted for by each factor when looking at the initiating and sustaining factors important to youth.

Furthermore, new information was discovered within the activity environment domain through the use of factor analysis. The factor analysis performed on the 12 activity dimension questions yielded two components: *Structure* and *Supportive Social Environment*. Originally, I expected three components to emerge: *Structure*, *Social Interaction*, and *Feedback*. Although *Structure* surfaced as expected, items from the proposed *Social Interaction* component were instead combined with the *Feedback* component to form the factor *Supportive Social Environment*. Originally, it was believed that BIS in relation to a social interaction component would result in a negative association with *Positive QE*. However, following factor analysis, a component termed *Supportive Social Environment* was found. Although this new factor contained more of a positive feedback/support component, the original hypothesis was tested.

One reason why the *Feedback* factor may not have emerged is that the experiences of both negative and neutral feedback were skewed, such that very few participants reported being exposed to any of these two types of feedback. This also was found in research conducted by Foster and Meinhard (2000), in which only 5% of participants reported receiving negative feedback from their supervisors.

Several limitations are also apparent. Although some variability existed within the variable *Future Service Intention*, assessing the degree of intention would be beneficial. Participants' future intention to participate could be evaluated using a Likert-type scale

rather than the “Yes”, “No”, and “I’m not sure” choices that were used in the present study. Youniss and Yates (1997) used a Likert-type scale when assessing future service participation (i.e., “definitely”, “very likely”, “somewhat”), which allowed them to assess youths’ intentions on a continuum.

In addition, some initiating and sustaining factors of community service involvement were correlated with the motivational systems only at trend level of significance ($<.10$); thus, some findings may have been over interpreted. Therefore, it is important that the reader interpret the findings and consider the recommendations with caution. Also, the differences between the partial correlations of BIS and BAS with each initiating and sustaining factor were not statistically examined. Future research could examine these differences using the method outlined by Cohen and Cohen (1983, p. 56), which involves testing the significance of the difference between correlation coefficients. In the current study, coefficients have not been determined from an independent sample, thus, a t-test formula would need to be used rather than the Fisher z (Cohen & Cohen, 1983).

Moreover, it is possible that participants may have rated their community service experience more positively because they were aware that the researcher would be examining their responses. However, because no social desirability measure was included in the current study, there is no way to know whether participants were influenced by social desirability. Future research examining youths’ perceptions of the quality of their community service experience should include a measure to assess social desirability.

Interview Schedule

Interviews allowed me to gather information regarding initiating and sustaining

factors beyond the questionnaire items; a strength discussed earlier in relation to interviewing techniques (Way, 2005). Some ideas were found to be similar to the initiating items assessed in the questionnaire, such as being involved with friends or receiving support and encouragement from others involved in the service activity. However, new initiating ideas also emerged. Similarly, some ideas were common to both quantitative and qualitative data, such as feelings of making a difference. However, new sustaining ideas also emerged. Furthermore, the quality of experience interview questions allowed for a better understanding of what participants considered to be, for example, stressful or rewarding. This also allowed for richer description of the participants' experiences based on multiple experience qualities. It is important that future research examine the new factors that emerged within the present study in order to determine whether these factors are replicated in other research.

BIS and BAS were assessed both quantitatively using the BIS/BAS scales (Carver & White, 1994) and qualitatively using a subjective temperament description from each participant. When the self-descriptions were coded, however, they did not always match the participant's z-score from the BIS/BAS. One reason may be that the BIS and BAS questions assessed a wider range of areas, whereas the interview examined a more focused area, asking about new people and situations.

The selection of the activity for discussion in the interview that the youth contributed the most time from their mandatory and voluntary activity may have made a difference in the results. I selected the activity based on intensity of participation (i.e., the number of hours that youth participated) to allow for the most number of experiences to be discussed. A disadvantage to selecting activities in this manner is that the number of

participation hours spent in the activity may not have been indicative of the activity in which the participant had the most interest or was most passionate. Therefore, participants may not have been able to share experiences that they would have preferred. This would be interesting to ask within in a future study.

Future Research

Age Differences

Wilson (2005) emphasized the notion of “role-sets” as being important to consider when discussing community service participation. Role-sets are described as situations and responsibilities unique to specific life stages (Wilson, 2005). Within the present study, participants were homogeneous in the sense that they were all 18-20 years of age. Thus, youth in this age category may experience service differently than younger youth or adults. For example, older youth may be exposed to different opportunities, such as participating in positions with greater expectations of responsibility, than younger youth. Furthermore, older youth may have greater access to transportation and more social contacts than younger youth and thus have greater exposure to a variety of experiences.

Moreover, participants shared the role-set of being a university student. Along with being a student come certain responsibilities that can consume time and resources. Wilson (2005) suggested that individuals allocate their time according to the needs they require to be met. For example, students may differ in amount of participation based on the school funding available to them from outside sources. Therefore, if a student is required to work more hours to finance his or her education, less time is available for activities such as community service.

In addition, the types of community service activities (see McLellan & Youniss, 2003) that are selected by youth in this age group may differ from those selected by adults (Statistics Canada, 2000). As mentioned previously, interest-based activities help youth to consolidate identity (Flanagan et al., 2005). Therefore, the selection of service activities at this age may be influenced more by interests than in other age groups. Thus, it is important for future researchers to continue to examine youths' community service experiences separately from adults in order to understand which aspects of service are most important to this younger age group in order to help direct them to a path of life-long community involvement.

Sex Differences

Previous researchers have examined youth sex differences in community service involvement in relation to attitudes towards participation (Miller, 1994; Stukas et al., 1999), amount of involvement in activities (Bartko & Eccles, 2003; Johnson et al., 1998; Karniol et al., 2003), experience outcomes (Foster & Meinhard, 2000), and personal characteristics such as "ethic of care" (Karniol et al., 2003). In the present study, it was found that young women were more likely to be higher on BIS and rate their community service experience as higher on *Positive QE* than were men. Carver and White (1994) also found that women were more likely to be higher on BIS than were men. In past research, young women were found to hold a more positive attitude toward their helping activities, felt more positive toward required service programs, and experienced more positive outcomes from their service participation than did young men (Foster & Meinhard, 2000; Stukas et al., 1999). In the present study, mandatory and voluntary community service activities were combined; therefore, it is hard to separate whether

young men simply had lower positive experiences than young women or whether their beliefs about being required to participate were involved. In future research, investigators should examine further sex differences in the relation between motivational systems and initiating and sustaining factors.

BIS/BAS

Within the current study, BIS and BAS were controlled to examine the unique variance accounted for by each factor. Similar techniques were used in several other recent studies (e.g., Demaree, Robinson, Everhart, & Youngstrom, 2005; Muris, Meesters, de Kanter, & Timmerman, 2005). However, studies that have used the BIS/BAS measure have not examined interactions between BIS and BAS. In the current study, BIS and BAS were significantly and negatively related suggesting that very few individuals would be high on both BIS and BAS or low on each system. However, Carver and White (1994) did not find that BIS and BAS were correlated, suggesting that high and low groups within each system are likely to occur. Thus, in future research, interactions between BIS and BAS should be examined to determine whether individuals high or low on both motivational systems differ from other individuals on initiating and sustaining factors.

Summary of Findings

One goal of this study was to determine whether certain initiating and sustaining factors were important to individuals higher on either or both motivational systems. Initiating factors and suggestions for involvement found to be important in helping initiate participation, specifically in higher BIS youth, included becoming involved with friends and/or familiar others, being in a familiar and/or comfortable environment, being

directly offered a community service position, and meeting others within the service activity. Initiating factors and suggestions for involvement found to be important, specifically to higher BAS youth, included the availability of options in the community, flexible hours of participation, and persistence. In addition, several initiating factors and suggestions for involvement were found to be important for individuals regardless of their motivational system orientation: believing in the cause supported by the service agency; expecting to enjoy the service activity; finding activities that reflected interests; getting informed or involved; trying out a variety of activities; and matching personal characteristics to activities.

Factors that were found to be important in helping youth higher in BIS to sustain community service participation included receiving support from their service supervisor, doing more focussed tasks rather than a variety of tasks, being comfortable participating in the activity, and being interested in the activity. Sustaining factors that were found to be important to youth higher in BAS included receiving support from family and friends, feelings of making a difference within the activity, and being appreciated and praised at the service site. In addition, several factors were found to be important in sustaining participation for individuals regardless of their motivational system orientation: enjoyment of working toward the goals; meeting new people and making new friends; having positive experiences within the activity; participating with familiar others; and participating in positive social interactions with others involved in the activity.

The quality of experience dimensions within the factors *Positive QE* and *Stress-Challenge QE* were examined qualitatively. Although the community service activities in which the eight interviewees participated were different, quality of experience factors

overlapped across interview participants. In general, the factor *Positive QE* included opportunities to witness children's learning and development, receiving appreciation and praise from others, meeting and interacting with new people, and experiencing personal accomplishments (e.g., leadership abilities). The factor *Stress-Challenge QE* included planning, preparing for activities and events in which the participants were responsible, and helping children to learn and have fun simultaneously.

Women were more likely to rate their quality of experience higher on *Positive QE* than were men. However, the hypothesis that *Positive QE* would be predicted by the interaction of BIS and *Structure* was not supported. Although not hypothesized, it was found that *Positive QE* was predicted by the interaction of BAS and *Structure*. No support was found for the interaction of BIS and *Supportive Social Environment* predicting *Positive QE*. Similarly, no support was found for the hypothesis that *Positive QE* would be predicted by the interaction of BAS and *Supportive Social Environment*. However, support was found for the main effect of *Supportive Social Environment*. Participants who rated their activity as higher on *Supportive Social Environment* were more likely to have rated their quality of experience as higher in *Positive QE* than participants who rated their activity as lower on this factor. No support was found for either hypothesis predicting a mediational model.

General Conclusions

Community service activities involving opportunities for social interaction have been associated with positive service outcomes (McLellan & Youniss, 2003; Metz et al., 2003). The results of this study suggest that participating in a community service environment that is supportive and provides the opportunity for social interactions with

others would promote positive quality of experience and help youth sustain involvement. Thus, to help youth have positive experiences and to remain active in service, it is important for service agencies to promote these types of environments. Therefore, future research is needed to examine factors that help promote the factor *Supportive Social Environment*, which includes positive feedback and social interaction (e.g., doing tasks in a team and meeting new people). Furthermore, I examined factors that would help youth both to become and stay involved in service activities. Some factors important to initiating and sustaining involvement were specific to individuals higher on BIS or individuals higher on BAS. Several factors also were found to be important to individuals regardless of their motivational system orientation. Therefore, service agencies may need to consider using different recruitment and retention strategies, depending on the type of youth they wish to recruit.

References

- Ahadi, S. A., & Rothbart, M. K. (1994). Temperament, development, and the Big Five. In C. F. Halverson, Jr., G. A. Kohnstamm, et al. (Eds.), *The developing structure of temperament and personality from infancy to adulthood* (pp. 189-207). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Aiken, L. S., & West, S. G. (1991). *Multiple regressions: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bartko, W. T., & Eccles, J. S. (2003). Adolescent participation in structured and unstructured activities: A person-oriented analysis. *Journal of Youth & Adolescence*, 32, 233-241.
- Berg, B. L. (1995). *Qualitative research methods for the social sciences* (pp. 1-13). Boston: Allyn and Bacon.
- Bringle, R. G. (2005). Designing interventions to promote civic engagement. In A. Omoto (Ed.), *Processes of community change and social action* (pp. 167-187). New Jersey: Lawrence Erlbaum Associates, Publishers.
- British Columbia Ministry of Education. (2005). Program guide for ministry-authorized work experience courses. Retrieved August 29, 2005 from http://www.bced.gov.bc.ca/careers/work_experience.pdf
- Buss, D. M. (1987). Selection, evocation, and manipulation. *Journal of Personality and Social Psychology*, 53, 1214-1221.
- Buss, A. H., & Plomin, R. (1984). *Temperament: Early developing personality traits*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Busseri, M., Campbell, K., Pancer, M., & Rose-Krasnor, L. (August, 2003). Testing a model for youth engagement and positive outcomes. Poster presented at the annual meeting of the American Psychological Association (Toronto, Ontario, Canada).
- Busseri, M., A., & Rose-Krasnor, L. (submitted). Youth activity involvement and positive development in young women: Do subjective experiences matter?
- Campbell-Sills, L., Liverant, G. I., & Brown, T. A. (2004). Psychometric evaluation of the behavioral inhibition/behavioral activation scales in a large sample of outpatients with anxiety and mood disorders. *Psychological Assessment*, 16, 244-254.

- Carlo, G., Roesch, S. C., & Melby, J. (1998). The multiplicative relations of parenting and temperament to prosocial and antisocial behaviors in adolescence. *Journal of Early Adolescence, 18*, 266-290.
- Carver, C. S. (2004). Negative affects deriving from the behavioral approach system. *Emotion, 4*, 3-22.
- Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin, 26*, 741-751.
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319-333.
- Caseras, X., Avila, C., & Torrubia, R. (2003). The measurement of individual differences in behavioural inhibition and behavioural activation systems: A comparison of personality scales. *Personality and Individual Differences, 34*, 99-1013.
- Chartrand, J. M. (1991). The evolution of trait-and-factor career counselling: A person x environment fit approach. *Journal of Counseling & Development, 69*, 518-524.
- Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current Directions in Psychological Science, 5*, 156-159.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioural sciences*. (2nd Ed.). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Cresswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA.: Sage Publications, Inc.
- Csikszentmihalyi, M. & LeFevre, J. (1989). Optimal experience in work and leisure. *Journal of Personality and Social Psychology, 56*, 815-822.
- da Silva, L., Sanson, A., Smart, D., & Toumbourou, J. (2004). Civic responsibility among Australian adolescents: Testing two competing models. *Journal of Community Psychology, 32*, 229-255.
- Demaree, H. A., Robinson, J. L., Everhart, D. E., & Youngstrom, E. A. (2005). Behavioral inhibition system strength and trait dominance are associated with affective response and perspective taking when viewing dyadic interactions. *International Journal of Neuroscience, 115*, 1579-1593.

- Derryberry, D. (1987). Incentive and feedback effects on target detection: A chronometric analysis of Gray's model of temperament. *Personality and Individual Differences*, 8, 855-865.
- Derryberry, D., & Reed, M. A. (1994). Temperament and attention: Orienting toward and away from positive and negative signals. *Journal of Personality and Social Psychology*, 66, 1128-1139.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34, 169-189.
- Elliot, A. J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review*, 13, 73-92.
- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82, 804-818.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.
- Eysenck, H. J. (1967). *The biological basis of personality*. Thomas, Springfield, IL.
- Flanagan, C., Gill, S., & Gallay, L. (2005). Social participation and social trust in adolescence: The importance of heterogeneous encounters. In A. Omoto (Ed.), *Processes of community change and social action* (pp. 149-166). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Foster, M. K., & Meinhard, A. G. (July, 2000). *Structuring student volunteering programs to the benefit of students and the community: The Ontario experience*. Presented at the 4th International Society for Third Sector Research Conference, Dublin, Ireland.
- Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology*, 78, 1135-1149.
- Gati, I. (1998). Using career-related aspects to elicit preferences and characterize occupations for a better person-environment fit. *Journal of Vocational Behavior*, 52, 343-356.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference: 11.0 update* (4th ed.). Boston: Pearson Education, Inc.
- Gilman, R., Meyers, J., & Perez, L. (2004). Structured extracurricular activities among adolescents: Findings and implications for school psychologists. *Psychology in the Schools. Special Positive Psychology and Wellness in Children*, 41, 31-41.

- Goldsmith, H. H., Buss, A. H., Plomin, R., Rothbart, M. K., Thomas, A., Chess, S., et al. (1987). Roundtable: What is temperament? Four approaches. *Child Development*, 58, 505-529.
- Gomez, A., & Gomez, R. (2002). Personality traits of behavioural approach and inhibition systems: Associations with processing of emotional stimuli. *Personality and Individual Differences*, 32, 1299-1316.
- Gray, J. A. (1972). *The psychophysiological basis of Introversion-Extraversion: A modification of Eysenck's theory*. In V. D. Nebylitsyn & J. A. Gray (Eds.), *The biological bases of individual behaviour* (pp.182-205). San Diego, CA: Academic Press.
- Gray, J. A. (1987). Perspectives on anxiety and impulsivity: A commentary. *Journal of Research in Personality*, 21, 493-509.
- Hamilton, S. F., & Fenzel, L. M. (1988). The impact of volunteer experience on adolescent social development: Evidence of program effects. *Journal of Adolescent Research*, 3, 65-80.
- Heubeck, B. G., Wilkinson, R. B. & Cologon, J. (1998). A second look at Carver and White's (1994) BIS/BAS scales. *Personality and Individual Differences*, 25, 785-800.
- Huebner, A. J. & Mancini, J. A. (2003). Shaping structured out-of-school time use among youth: The effects of self, family, and friend systems. *Journal of Youth and Adolescence*, 32, 453-463.
- Janoski, T., Musick, M., & Wilson, J. (1998). Being volunteered? The impact of social participation and pro-social attitudes on volunteering. *Sociological Forum*, 13, 495-519.
- Janoski, T., & Wilson, J. (1995). Pathways to voluntarism: Family socialization and status transmission models. *Social Forces*, 74, 271-292.
- Johnson, M. K., Beebe, T., Mortimer, J. T., & Snyder, M. (1998). Volunteerism in adolescence: A process perspective. *Journal of Research on Adolescence*, 8, 309-332.
- Jorm, A. F., Christensen, H., Henderson, A. S., Jacomb, P. A., Korten, A. E., & Rodgers, B. (1999). Using the BIS/BAS scales to measure behavioural inhibition and behavioural activation: Factor structure, validity and norms in a large community sample. *Personality and Individual Differences*, 26, 49-58.

- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.
- Karniol, R., Grosz, E., & Schorr, I. (2003). Caring, gender role orientation, and volunteering. *Sex Roles*, 49, 11-19.
- Klein, H. A. (1987). The relationship of temperament scores to the way young adults adapt to change. *The Journal of Psychology*, 121, 119-135.
- Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55, 170-183.
- Lincoln, Y.S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic Inquiry* (pp. 289-327). Thousand Oaks, CA: Sage.
- McCrae, R. R., Costa, P. T., Ostendorf, F., Angleitner, A., Hrebickova, M., Avia, M. D., et al. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology*, 78, 173-186.
- McCrae, R. R. & John, O. P. (1991). An Introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175-215.
- McLellan, J. A., & Youniss, J. (2003). Two systems of youth service: Determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, 32, 47-58.
- Mahoney, J. L. (2000). School extracurricular activity participation as a moderator in the development of antisocial patterns. *Child Development*, 71, 502-516.
- Mahoney, J. L. & Schweder, A. E., & Stattin, H. (2002). Structured after-school activities as a moderator of depressed mood for adolescents with detached relations to their parents. *Journal of Community Psychology*, 30, 69-86.
- Mahoney, J. L. & Stattin, H. (2000). Leisure activities and adolescent antisocial behavior: The role of structure and social context. *Journal of Adolescence*, 23, 113-127.
- Martinez, T. A., & McMullin, S. L. (2004). Factors affecting decisions to volunteer in nongovernmental organizations. *Environment and Behavior*, 36, 112-126.
- Metz, E., McLellan, J., & Youniss, J. (2003). Types of voluntary service and adolescents' civic development. *Journal of Adolescent Research*, 18, 188-203.
- Middleton, E. B., & Kelly, K. R. (1996). Effects of community service on adolescent personality development. *Counseling & Values*, 40, 132-142.
- Miller, F. (1994). Gender differences in adolescents' attitudes toward mandatory community service. *Journal of Adolescence*, 17, 381-393.

- Miller, K. D., Schleien, S. J., Rider, C., Hall, C., Roche, M., & Worsley, J. (2002). Inclusive volunteering: Benefits to participants and community. *Therapeutic Recreation Journal*, 36, 247-259.
- Ministry of Education and Training. (1999). Diploma requirements and related procedures (chap. 3). In *Ontario secondary schools, grades 9 to 12: Program and diploma requirements, 1999*. Retrieved August 8, 2005, from <http://www.edu.gov.on.ca/eng/document/curricul/secondary/oss/oss.pdf>
- Muris, P., Meesters, C., de Kanter, E., & Timmerman, P. E. (2005). Behavioural inhibition and behavioural activation system scales for children: Relationships with Eysenck's personality traits and psychopathological symptoms. *Personality and Individual Differences*, 38, 831-841.
- Okun, M. A., & Schultz, A. (2003). Age and motives for volunteering: Testing hypotheses derived from socioemotional selectivity theory. *Psychology and Aging*, 18, 231-239.
- Omoto, A. M., & Snyder, M. (1990). Basic research in action: Volunteerism and society's response to AIDS. *Personality and Social Psychology Bulletin*, 16, 152-165.
- Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 68, 671-686.
- Omoto, A. M., & Snyder, M. (2002). Considerations of community. *The American Behavioral Scientist*, 45, 846-867.
- Pancer, S. M., & Cameron, G. (1994). Resident participation in the Better Beginnings, Better Futures prevention project: Part I- the impacts of involvement. *Canadian Journal of Community Mental Health*, 13, 197-211.
- Pancer, S. M., & Pratt, M. W. (1999). Social and family determinants of community service involvement in Canadian youth. In M. Yates & J. Youniss (Eds.), *Roots of civic identity: International perspectives on community service and activism in youth* (pp. 32-55). New York, NY, US: Cambridge University Press.
- Patton, M. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA.: Sage Publications, Inc.
- Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58, 447-467.
- Penner, L. A., & Finkelstein, M. A. (1998). Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology*, 74, 525-537.

- Primavera, J. (1999). The unintended consequences of volunteerism: Positive outcomes for those who serve. *Journal of Prevention and Intervention in the Community*, 18, 125-140.
- Ross, S. R., Millis, S. R., Bonebright, T. L., & Bailley, S. E. (2002). Confirmatory factor analysis of the behavioural inhibition and activation scales. *Personality and Individual Differences*, 33, 861-865.
- Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology*, 78, 122-135.
- Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* (5th ed., Vol. 3, pp. 105-176). New York, NY, US: John Wiley & Sons, Inc.
- Ross, S. R., Millis, S. R., Bonebright, T. L., & Bailley, S. E. (2002). Confirmatory factor analysis of the behavioral inhibition and activation scales. *Personality and Individual Differences*, 22, 861-865.
- Schondel, C. K., & Boehm, K. E. (2000). Motivational needs of adolescent volunteers. *Adolescence*, 35, 335-344.
- Shiner, R., & Caspi, A. (2003). Personality differences in childhood and adolescence: Measurement, development, and consequences. *Journal of Child Psychology and Psychiatry*, 44, 2-32.
- Stack, H. L., Rose-Krasnor, L., Busseri, M., & Campbell, K. (June, 2005). *Community youth involvement and system-level outcomes*. Poster presented at the annual meeting of the Canadian Psychological Association, Montreal, QC.
- Statistics Canada. (2000). The national survey of giving, volunteering, and participating.
- Stellar, J. R., & Stellar, E. (1985). *The neurobiology of motivation and reward*. New York: Springer-Verlag.
- Stukas, A. A., Snyder, M., & Clary, E. G. (1999). The effects of "mandatory volunteerism" on intentions to volunteer. *Psychological Science*, 10, 59-64.
- Stukas, A. A., Jr., Switzer, G. E., Dew, M. A., Goycoolea, J. M., & Simmons, R. G. (1999). Parental helping models, gender, and service-learning. *Journal of Prevention and Intervention in the Community*, 18, 5-18.
- Tabachnick, B.G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn & Bacon.

- Thoits, P. A., & Hewitt, L. N. (2001). Volunteer work and well-being. *Journal of Health and Social Behavior*, 42, 115-131.
- Tourangeau, R. (2000). Remembering what happened: Memory errors and survey reports. In A. Stone, J. S. Turkkan, C. A. Bachrach, J. B. Jobe, H. S. Kurtzman, & V. A. Cain (Eds.), *The science of self-report: Implications for research and practice* (pp. 29-47). Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Way, N. (2005). Striving for engagement: Reflections from a qualitative researcher. *Journal of Adolescent Research*, 20, 531-537.
- Wilson, J. (2005). Some things social surveys don't tell us about volunteering. In A. Omoto (Ed.), *Processes of community change and social action* (pp. 11-27). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Yates, M. (1999). Community service and political-moral discussions among adolescents: A study of a mandatory school-based program in the United States. In M. Yates & J. Youniss (Eds.), *Roots of civic identity: International perspectives on community service and activism in youth* (pp. 16-31). New York, NY, US: Cambridge University Press.
- Yates, M., & Youniss, J. (1996). Community service and political-moral identity in adolescents. *Journal of Research on Adolescence*, 6, 271-284.
- Youniss, J., McLellan, J. A., Su, Y., & Yates, M. (1999). The role of community service in identity development: Normative, unconventional, and deviant orientations. *Journal of Adolescent Research*, 14, 248-261.
- Youniss, J., McLellan, J. A., & Yates, M. (1997). What we know about engendering civic identity. *The American Behavioral Scientist*, 40, 620-631.
- Youniss, J., & Yates, M. (1997). *Community service and social responsibility in youth*. Chicago: University of Chicago Press.

Appendix A

Brock University Ethics Clearance

DATE: January 28, 2005

FROM: Michelle McGinn, Acting Chair
Research Ethics Board (REB)

TO: Linda Rose-Krasnor, Psychology
Holly STACK
Jennifer EVANS,
Kelly CAMPBELL

FILE: 04-257 – STACK/EVANS/CAMPBELL

TITLE: Temperament, Engagement, and Identity

The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: Accepted as Clarified

This project has received ethics clearance for the period of January 28, 2005 to June 30, 2005 subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance may be extended upon request. The study may now proceed.

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and approved by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written approval from the REB. The Board must approve any modifications before they can be implemented. If you wish to modify your research project, please refer to <http://www.brocku.ca/researchservices/forms> to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects, with the exception of undergraduate projects, upon completion of the project.

Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form Continuing Review/Final Report is required.

Please quote your REB file number on all future correspondence.

Heather Becker, Office of Research Ethics
Brock University
Office of Research Services
500 Glenridge Avenue
St. Catharines, Ontario, Canada L2S 3A1
phone: (905)688-5550, ext. 3035 fax: (905)688-0748
email: hbecker@brocku.ca
<http://www.brocku.ca/researchservices/ethics/humanethics/>

Appendix B

Community Service Questionnaire Measures

Demographics

The next set of questions relate to general information that describes you and your family. These questions will help us understand if people from different kinds of backgrounds might have different opinions and experiences being involved. Please keep in mind that your responses will not be used to judge you and all information you provide is confidential.

How old are you? (in years)

What is your gender?

MALE

FEMALE

TRANS GENDER

*What is the highest grade your
mother
(or female guardian) completed?*

Not
applicable

Did not
finish high
school

Finished
high school

Some
college or
university

Finished
college or
university

Finished
graduate
degree

*What ethnic group(s) do you identify with?
(examples: Swedish, Chinese, French)*

What grade or university year are you in?

Community Service Involvement

MY COMMUNITY EXPERIENCES

In the following section (experience 1 and experience 2) there are spaces for you to describe your community service involvement. Please think of the one or two activities that you contributed your time to the most. If you have participated in both mandatory and voluntary community service please describe one of each type. If you have participated in only one type of community service, please describe the relevant activity below.

If you have never participated in a community service activity, please go to the next section (FUTURE COMMUNITY SERVICE)

Please describe the two experiences:

Mandatory Community Service _____

Voluntary Community Service _____

Experience 1: MANDATORY Community Service

The mandatory community service activity that I contributed the most time to (please list activity or organization below):

How many years have you participated in this activity? _____ years

```

graph LR
    A[Within the past year how many months have you participated in this activity? _____ months] --> B[Within these months how many weeks per month have you participated in this activity? _____ weeks]
    B --> C[Within these weeks how many days per week have you participated in this activity? _____ days]
    C --> D[Within these days how many hours per day have you participated in this activity? _____ hours]
  
```

Within the past year how many months have you participated in this activity? _____ months

Within these months how many weeks per month have you participated in this activity? _____ weeks

Within these weeks how many days per week have you participated in this activity? _____ days

Within these days how many hours per day have you participated in this activity? _____ hours

Experience 2: VOLUNTARY Community Service

The voluntary community service activity that I contributed the most time to (please list activity or organization below):

How many years have you participated in this activity? _____ years

```
graph LR; A[Within the past year how many months have you participated in this activity? _____ months] --> B[Within these months how many weeks per month have you participated in this activity? _____ weeks]; B --> C[Within these weeks how many days per week have you participated in this activity? _____ days]; C --> D[Within these days how many hours per day have you participated in this activity? _____ hours];
```

Within the past year how many months have you participated in this activity?
_____ months

Within these months how many weeks per month have you participated in this activity?
_____ weeks

Within these weeks how many days per week have you participated in this activity?
_____ days

Within these days how many hours per day have you participated in this activity?
_____ hours

Behavioural Inhibition/Behavioural Activation Scales

Please indicate how much you agree or disagree with the following statements by circling one number for each.	Strongly Disagree			Strongly Agree
When I get something I want, I feel excited and energized.	1	2	3	4
When I want something, I usually go all-out to get it.	1	2	3	4
* If I think something unpleasant is going to happen I usually get pretty 'worked up'.	1	2	3	4
* [†] Even if something bad is about to happen to me, I rarely experience fear or nervousness.	1	2	3	4
I often act on the spur of the moment.	1	2	3	4
It would excite me to win a contest.	1	2	3	4
* I worry about my mistakes.	1	2	3	4
When I see an opportunity for something I like, I get excited right away.	1	2	3	4
* I feel pretty worried or upset when I think or know somebody is angry with me.	1	2	3	4
I'm always willing to try something new if I think it will be fun.	1	2	3	4
* Criticism or scolding hurts me quite a bit.	1	2	3	4
When I go after something I use a 'no holds barred' approach.	1	2	3	4
When good things happen to me, it affects me strongly.	1	2	3	4
* [†] I have few fears compared to my friends.	1	2	3	4
I crave excitement and new sensations.	1	2	3	4
* I feel worried when I think I have done poorly at something.	1	2	3	4
I will often do things for no other reason than they might be fun.	1	2	3	4
I go out of my way to get things I want.	1	2	3	4
When I'm doing well at something, I love to keep at it.	1	2	3	4
If I see a chance to get something I want, I move on it right away.	1	2	3	4

Note. *Items on BIS scale. All other items are on the BAS scale. [†] Reverse coded items.

Initiating and Sustaining Items

How much would you say that the following things helped you to first get involved in the community service activity you chose?

	NOT AT ALL	A LITTLE	QUITE A BIT	YES, DEFINITELY
There were many options in my community	0	1	2	3
My friends were involved in a community service activity	0	1	2	3
I believed in the cause	0	1	2	3
I was interested in using my skills and knowledge in something new	0	1	2	3
I expected to enjoy the activity	0	1	2	3
My parents/family were involved in a community service activity	0	1	2	3

How much would you say that the following things helped you to stay involved in your community service activity?

	NOT AT ALL	A LITTLE	QUITE A BIT	YES, DEFINITELY
I felt comfortable doing the activity	0	1	2	3
I received support from my family or friends	0	1	2	3
I was given a variety of tasks to do	0	1	2	3
I received recognition for my accomplishments from others	0	1	2	3
I enjoyed working toward goals	0	1	2	3
I received support from my supervisor or other volunteers	0	1	2	3
I felt that I was making a difference	0	1	2	3
I felt that I learned something	0	1	2	3

Activity Dimensions

In order to better understand what your community service activity is or was like, we would like you to read the following sentences and for each sentence pick the answer that best fits your activity.

This community service activity:	NOT AT ALL	A LITTLE	QUITE A BIT	YES, DEFINITELY
Had an adult leader	0	1	2	3
Took place at regular times	0	1	2	3
Had clear goals to work toward	0	1	2	3
Required me to follow rules	0	1	2	3
Allowed me to interact with recipients in need	0	1	2	3
Was a place to meet new people	0	1	2	3
Involved doing tasks with a team	0	1	2	3
Involved doing tasks by myself	0	1	2	3
Provided training	0	1	2	3
Was a place that I received positive feedback	0	1	2	3
Was a place that I received neutral feedback	0	1	2	3
Was a place that I received negative feedback	0	1	2	3

Quality of Experience¹

We would now like you to tell us about the quality of this community service experience. Please circle the number that best fits your answer.

	NOT AT ALL	A LITTLE BIT	SO-SO	QUITE A BIT	TOTALLY
How much fun is or was this activity?	0	1	2	3	4
How good are you or were you at this activity?	0	1	2	3	4
How challenging is or was this activity?	0	1	2	3	4
How stressful is or was this activity?	0	1	2	3	4
How rewarding is or was this activity?	0	1	2	3	4
How much is or was this activity an important part of who you are?	0	1	2	3	4
How important to society is or was this activity?	0	1	2	3	4
How hard was it or would it be for you to give up this activity?	0	1	2	3	4
How much influence do you or did you have in this activity?	0	1	2	3	4

¹ Adapted from the Centre of Excellence for Youth Engagement (Busseri & Rose-Krasnor, submitted)

Future Community Service

Finally we would like to know whether you intend to participate in any type of community service in the future.

Do you intend to participate in community service...

	NO	I'M NOT SURE	YES
In the next month?			
In the next 6 months?			
In the next year?			

Community Service Involvement Interview Script

As I mentioned to you on the phone, the interview will take approximately 30 minutes and will be audio taped. And remember, you don't have to answer any questions that you don't want to. Before we begin, I would like you to think of a name that you would like me to refer to you as during the interview. Therefore, your real name will not be recorded.

Name of participant (pseudonym only): _____

Description of community service activity (extracted from questionnaire):

Are you currently participating in this activity? Yes _____ No _____

(RECORDER ON) Today is (date), the interviewer is Holly and the interviewee is (pseudonym).

Initiating and Sustaining Factors

I'm going to ask you some questions about becoming and staying involved in community service. In this study, we are interested in temperament, which is an early form of personality. So for example, some people may go to a party where they don't really know anyone and still feel comfortable, whereas other people may feel nervous the whole time. So, think about how you would feel in a situation like this.

1.) How would you describe your own temperament?

So, when answering the next two questions keep in mind that they are about someone with a similar temperament to your own. It doesn't have to be a specific person you know, just a general person with a similar temperament to yourself.

2.) What kinds of things would help someone, with a similar temperament to your own, get involved in a community service activity?

3.) What kinds of things would help someone, with a similar temperament to your own, stay involved in a community service activity?

Experience

Now I'm going to ask you some questions about the experiences that you had in the community service activity that you contributed the most time to. So, this activity will be the same one that you mentioned in the questionnaire part of this study and that we talked about before we began the interview. So, we'll be discussing your participation in (name activity).

4.) Could you please briefly describe the kinds of things you did while participating in this community service activity?

5.) Tell me about the aspects of the community service activity that you found to be the most *fun*.

6.) What were some of the things that made you feel that you were *good* at the activity?

7.) What aspects of the activity did you find the most *rewarding*?

8.) In what aspects of the activity do you think you had the most *influence*?

9.) What do you consider to be the most *challenging* aspects of the community service activity?

9a.) How did you go about dealing with these challenges?

10.) What do you consider to be the most *stressful* aspects of the community service activity?

10 a.) How did you go about dealing with these stressful aspects?

10 b.) How effective were these coping attempts for you? (Please explain)

Reflections

11.) What advice would you give to someone like yourself, so again, someone who is similar to you in temperament, who is deciding to participate in a community service activity?

Is there anything else you would like to tell me about what we've talked about today or anything else about community service that we haven't discussed?

Appendix C

Motivational Systems Classifications

Participants described their own temperament within an unfamiliar environment with unfamiliar people. Responses were coded using descriptors characteristic of BIS (shy, nervous, anxious) and BAS (e.g., outgoing, sociable, approachable). BIS and BAS were coded on both the amount of descriptors the participant used, along with the strength of the words. For example, a participant who described him/herself as “totally nervous” would receive a higher BIS score than a participant who said that they would feel “a bit awkward at first”. Participants who did not use any BIS descriptors when describing their temperament were coded as being low on BIS and participants who did not use any BAS descriptors were coded as being low on BAS.

BIS. Participants who were classified as being higher on BIS described themselves as “very shy” “nervous”, and would feel “awkward” when meeting new people. Monica, a participant who had both a high z-score on BIS ($z = 1.75$) and was classified as being high-BIS and low-BAS described herself as follows:

Monica: *And they're all people that I wouldn't know?*

Monica: *Okay I would be totally nervous. With new situations? I'm not really good with change.*

Monica: *So new situations kind of make me nervous.*

Holly: *Okay. And then similar as I mentioned with the party aspect?*

Monica: *Yeah.*

Holly: *Going to a party and not really knowing anyone...*

Monica: *Yeah. I'd be nervous. In fact I probably wouldn't even go.*

William also was classified as being high in BIS but medium in BAS. He described himself as *“kind of shy in new environments or unfamiliar environments”* and that he probably *“wouldn’t feel too comfortable not knowing anyone”*. He said that he would *“usually just kind of hang back and kind of like watch everyone else”*. However, he reported that he would maybe *“get involved if I see that like there’s an opportunity that like is related to my personality somehow”* but that he wouldn’t be *“directly comfortable right away”* saying that he would *“probably be a bit nervous”*.

BAS. In contrast, Heather received a low z-score on BIS ($z = -1.217$) and was coded as high on BAS. Heather described herself as being *“pretty comfortable around people even new people”* and reported that she’s *“never really that shy”* adding *“I don’t really usually feel uncomfortable in places”*.

Many of the participants were classified as being medium on both BIS and BAS. Mark, classified as medium on BIS and low on BAS, described himself as *“not very outgoing”* and that he *“wouldn’t be the one to initiate a conversation”* but rather would *“need somebody else to do that for me”*.

Katherine was classified as medium on both BIS and BAS saying, *“When I’m around new people I’m extremely shy”* but *“not as shy as I used to be”*. Also, she thought that *“my volunteering has brought out a lot more in me”* and now she is more *“open to talking to people”*.

Rebecca was classified as medium on both BIS and BAS, saying that when meeting new people she tends to be *“a bit nervous”*. But if there was a *“common goal or common connection”* that it would be easier to meet other people.

Sarah also was classified as medium on both BIS and BAS saying that she would “*feel a little awkward at first*” but that it is “*a lot easier to just go around and be like ‘hey what’s up?’ to other people.*” Furthermore, she reported that she was “*pretty outgoing*”, would not “*just sit there in a corner and like look like I’m feeling really awkward*” and would “*try and interact the best I can and not feel like awkward*”.

Mary was classified as low on BIS and medium on BAS, describing herself as “*Easy going*”, “*Happy*” and “*Relaxed*”. When asked how she would feel not knowing anyone at the party she said that she would “*feel comfortable*”.

