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Discovering Your Possibilities: From Risk to Resilience: Does the Discovering Your Possibilities Progarm Increase Academic Success and Resiliency in At-Risk Youth?

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Discovering Your Possibilities: From Risk to Resilience:
Does the *Discovering Your Possibilities Program* Increase Academic Success and Resiliency in
At-Risk Youth?

by

Kathleen Furlong

A Thesis
Submitted to the Faculty of Graduate Studies
Through the Faulty of Education
In Partial Fulfillment of the Requirements for
the Degree of Master of Education at the
University of Windsor

Windsor, Ontario, Canada

2011

Does the *Discovering Your Possibilities Program* Increase Academic Success and Resiliency in At-Risk Youth?

By

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ABSTRACT

The purpose of this study is to evaluate whether or not a school-based program designed to increase academic success and resiliency in at-risk grade 10 students met its objectives. The study sought to assess the null hypothesis that there is no relationship between academic performance, as identified by student engagement, and the intervention, and that there is no relationship between resiliency and the intervention. The study investigated two research questions. Does the intervention, the *Discovering Your Possibilities* (DYP) program increase students' academic success, as identified by student engagement: increase in attendance, decrease in lates, improved credit accumulation and increase in grade point average (GPA), and does it increase the level of resiliency of at-risk youth? What elements in the program contributed to resiliency (if any) from the perceptions of the students, and from the perceptions of the Student Success Teachers (SSTs)?

An explanatory mixed methods design was used in this study as both quantitative data was collected and analyzed and qualitative data, audio interviews of students and teachers, was gathered in order to explain and expand the quantitative results. The results of this study indicate that the intervention had a positive effect on academic success for those students who participated more fully in the intervention. While the quantitative data results indicate that there is no relationship between resiliency and the intervention, the qualitative data indicates that the intervention positively affected resiliency.

DEDICATION

I would like to dedicate this thesis to my very supportive husband Ed, to my sons Sean and Scott Furlong, and to my parents Michael and Linda Sheehan, my first two outstanding teachers. I would also like to dedicate this thesis to the amazing young people and educators that I have had the privilege to work with throughout the implementation of the *Discovering Your Possibilities* program.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

DYP   Discovering Your Possibilities

EQAO   Education Quality and Accountability Office

GPA   Grade Point Average

LEAD   Leadership Experience for Academic Directions

MANOVA   Analysis of Variance Test

PARTY   Prevention of Alcohol and Risk-Related Trauma in Youth

PYD   Positive Youth Development

RASP   Resiliency Aptitude and Skills Profile

SES   Socioeconomic Status

SPSS   Statistical Package for the Social Sciences

SST   Student Success Teacher

WECDSB   Windsor-Essex Catholic District School Board

YLCC   Youth Leadership Camps Canada

CHAPTER I

INTRODUCTION

Adolescence is a time of tumultuous change. As youth transition from childhood to

adulthood and move towards establishing their own identity, they often engage in risky

behaviour (Laszlo, Piko, Steger, 2011**;** Rew and Horner, 2003, as cited in Cheng, Hsu, Lee, Lin,

and Wang, 2009; Scales, 2005). During adolescence the risk of anti-social behaviour peaks

(Aklin et al., 2011; Dolan and Rennie, 2010). Since patterns of behaviour and lifestyle choices

established during adolescence can have immediate and lasting effects on health, adolescence is

an important time to prevent damaging life patterns and promote successful developmental

trajectories (Aklin et al., 2011; Grant et al. 2011; Graves and Stevens-Watkins, 2011; Gutman et

al., 2002, as cited in Cheng et al., 2009).

Adolescents identify themselves with peers outside the family group; therefore they are

greatly influenced by peers' risk behaviours. Since risk behaviour has been found to increase as

school grade level increases, and adolescents spend a large part of their time in school, Cheng et

al. (2009) suggest that school-based programs that create a peer norm of avoiding risk

behaviours may be useful for reducing these behaviours. These researchers recommend that

experimental studies be conducted to validate this supposition.

Students' sense of belonging in their school environment is positively related to liking school,

enjoying class, demonstrating a concern for others, and having conflict resolution skills, and

negatively related to depressive symptoms, social rejection, peer victimization, delinquency, and

drug use (Anderman, 2002; Battistich and Hom, 1997; Hagerty et al., 1992; Solomon et al.,

2000, as cited in Russell-Mayhew and Short, 2009). Studies also indicate that adolescents

possessing greater numbers of assets are consistently more likely to be successful in school, be

leaders, value diversity, resist danger, and maintain good health (Benson et al., 2004, as cited in Russell-Mayhew and Short, 2009). Therefore communities benefit from increased resiliency in youth.

The talents, skills, knowledge and emotional resources of all youth need to be developed in order for Canada to produce graduates who will continue to enable the country to compete in the new knowledge-based global economy and to ensure the continuance of a civil society (Friesen, Milton, and Willms, 2009). According to a 2008 World Health Organization report, engagement and participation in school are important for "social development, health, and well–being" because "restricted participation results in deprivation of human capabilities" (Commission on Social Determinants of Health, 2008, as cited in Friesen et al., 2009, p. 7). Thus more attention needs to be directed at how to equip all young people for success in a period of massive, rapid and unpredictable social, technological and economic change (Friesen et al., 2009).

Research in the past 30 years has proven that the current model of schooling no longer adequately meets the needs of young people or a contemporary Canadian society (2009). There is growing concern about the number of students who are fading out or dropping out and about the gaps in achievement among different groups of students (Education Quality and Accountability Office, 2011; Friesen et al., 2009; Klinger et al., 2009). Students who are at-risk, specifically those who live in poverty, students with disabilities, students from ethnic minorities, and aboriginal communities disproportionately experience disengagement (Boydell et al., 2005; Audas and Willms, 2001; Caledon Institute for Social Policy, 2006; Community Health Systems Resource Group, 2005; Richards and Vining, 2004, as cited in Friesen et al., 2009; Graves and Stevens-Watkins, 2011; Holloway and Salinitri, 2009).

Disengagement in and from school is linked to school violence, social exclusion, and a polarized nation severe enough to pose a threat to social cohesion in Canada (Friesen et al., 2009). According to the Canadian Council on Learning (2009), the personal and social costs of disengaged students who drop out of high school are extensive. Those who drop out of high school experience an income loss of more than $100,000 over a lifetime, compared to individuals with a high school diploma and no postsecondary education. Social assistance costs are estimated at over $4,000 per year per student who drops out and these students are overly represented in the prison population. Their health costs, combining morbidity and mortality costs, are estimated at $8,000 a year (Ontario Ministry of Education, 2009). Therefore student engagement extends beyond the individual and affects the entire community.

Resiliency research findings indicate that without significantly changing the environments in which youth live, attempts to enhance resilience will be met with limited success (Armstrong et al., 2005; Eccles and Gootman, 2002, as cited in Russell-Mayhew and Short, 2009). Hence there is an urgent need for effective programs that promote pro-social behaviour during adolescence and that keep youth engaged in learning until graduation. According to Fergus and Zimmerman (2005), most studies of resiliency focus on individual assets and family-level resources, and little research exists that examines how school and community-level resources can foster resiliency in adolescents. Friesen et al. (2009) reiterate that while it is evident that changes in the learning environments of young people are needed, less attention has been focused on how to transform these learning environments for adolescent learners. Thus there is a need for educators to create new learning environments that will increase students' resiliency so as to engage learners until graduation.

Purpose of the Study

Six years have been invested financially and in human resources by the Windsor-Essex Catholic District School Board and by the University of Windsor in a program designed to provide school and community resources in order to increase resiliency in at-risk youth and engage these youth in learning until graduation. There is a need to evaluate the program to determine if it is meeting its program outcomes and to identify what needs to be improved to increase the effectiveness of the program. The need to develop well-educated resilient youth to insure the progress of the nation cannot be understated.

CHAPTER II

REVIEW OF LITERATURE

History of Resiliency Research

Resiliency research can be traced back to the 1960's and 1970's where it originated in the medical field. Doctors and scientists who were treating and studying mental illness wanted to discover why some patients had positive life trajectories after exposure to adverse circumstances, while others did not. Thus the first wave of resiliency research came from psychopathology (Fergus and Zimmerman, 2005; Masten, 2007). Resiliency from this perspective was understood as the antithesis of risk. Investigations into resiliency began by first understanding the concept of risk and the factors that would increase risk, as well as how to prevent problem behaviours such as youth violence, drug and alcohol abuse, teenage pregnancy, school failure, and dropout rates (Small and Memmo, 2004, as cited in Hughes, 2006). This problem-based paradigm can still be found in resiliency research today.

As researchers recognized that many youth who lived in high-risk environments managed to avoid engaging in risky behaviours and had positive developmental trajectories, a new wave of resiliency research emerged. This new wave focused on internal and external protective factors that seemed to mitigate risk (Garmezy, 1983; Rutter, 1987; Sameroff, Bartko, Baldwin, Baldwin and Seifer, 1998; Werner and Smith, 2001, as cited in Hughes, 2006). Resiliency research focused on characteristics of child, family, relationships, and environments that seemed to contribute to resilience (Masten, 2007). Research on attachment relationships and family interactions, psychobiological stress reactivity, and self-regulation systems for attention, arousal, emotion, and behaviour characterize this wave of resiliency research (2007). Thus the study of resiliency began to shift from a problem-based paradigm to a strengths-based paradigm.

A range of studies were completed that researched prevention, resilience, and adolescence. These studies demonstrated that the same individual, family, school, and community factors predicted both negative and positive outcomes for youth. Thus emerged the positive youth development (PYD) approach to the study of resiliency (Barber, 1997; Fuligini and Harway, 2004; Garmezy, 1983; Gore and Eckenrode, 1994, as cited in Hughes, 2006). With the shift from a problem-focused paradigm to healthy adolescent development came the understanding that parents, families, schools, community, and non-family adults all have the ability to have a positive impact on youth development. Researchers in this wave of resiliency research were trained in community, clinical, and educational psychology, and prevention, with a focus on promoting competence and wellness, as well as primary prevention (Cicchetti, Rappaport, Sandler and Weissberg, 2000; Masten, Burt and Coastworth, 2006; Wang and Gordon, 1994, as cited in Masten, 2007). This wave of resiliency research comes from a strengths-based paradigm. Masten contends that a fourth wave of resiliency research has begun. It is focused back on the medical field and is influenced by technological advances in gene, brain and developmental psychology research.

Risk

One cannot study resiliency without investigating the concept of risk. Risk refers to a youth's susceptibility to adversity (Russell-Mayhew and Short, 2009). Adversities facing youth can range from long–term chronic stressors to short–term acute stressors, or to traumatic stressful events. Some risk exposures may have immediate acute effects on adolescents, but the effects may dissipate relatively quickly. Other exposures may not be as dramatic, but may be chronic and linger over time (Fergus and Zimmerman, 2005). Therefore risk fluctuates over time and is based on circumstances and context, rather than being a fixed quality. Exposure to multiple risk

factors increases the likelihood of problematic outcomes, and the impact of exposure to risk factors at a young age may be more detrimental than exposure later in life (Schonert-Reichl, 2000, as cited in Holloway and Salinitri, 2010). Mayer et al. (2011) conclude that young people are at risk when vulnerability factors clearly exceed protective variables.

Risk factors are hazards or threats that increase vulnerability or susceptibility to negative developmental or health outcomes (Engle et al., 1996, as cited in Cheng et al., 2009). Kirby and Fraser (1997, as cited in Dumond, McDonald, and Unger, 2005) identify the following factors as influencing risk: genetic, biological, behavioural, sociocultural, and demographic conditions, characteristics or attributes. According to Romer (2003, as cited in Dumond et al., 2005) risk is understood as a collection of factors, including behaviors that predict poor mental and physical health outcomes. Bettge, Ravens-Sieberer, and Wille (2008) suggest that risk factors tend to cluster and interact, while Alter, Anthony, and Jensen (2009) suggest that risks may appear as a single condition or as a cluster of conditions and may occur within the individual or within the environment. Grant et al. (2011) contend that risk factors in adolescents tend to cluster, such that a subset of youth engage in multiple risk behaviours while Fergus and Zimmerman (2005) found that experiences of the same adverse event or condition may differ across adolescents.

Conceptually risk factors increase the likelihood of youth engaging in risk behaviours (Cheng et al., 2009). High-perceived life-stress was found to increase the risk for behavioural problems among Chinese and US adolescents (Liu et al., 2000, as cited in Cheng et al., 2009). Ingersoll, Orr, and Rouse (1997) found that at-risk youth tend to have lower levels of self-esteem and are more likely to initiate health-endangering behaviours, such as the use of alcohol and drugs, as well as self-injurious behaviours. Behaviours that the literature identifies as increasing youths' susceptibility to long term negative outcomes include: substance use including the use of

tobacco, sexual experience, depression and suicidal ideation, anti-social and violent behaviours, school attendance, school failure and the desire to drop out, vehicle safety, and bulimia. (Cheng et al., 2009; Clarke, 1995; Grant et al., 2011).

Environmental risk factors have been found to influence adolescent risk behaviours (Millstein and Ingra, 1995, as cited in Cheng et al., 2009). Environmental risk factors identified in the literature include: poverty, peer and parental risk behaviours, and the erosion of adolescents' familial and social support networks (Bettge, et al., 2008; Boydell et al., 2005; Cheng et al., 2009; Fergus and Zimmerman, 2009; Friesen et al., 2009; Graves and Stevens-Watkins, 2011; Holloway and Salinitri, 2010; Knop, O'Sullivan, and Tannehill, 2001). Adolescents growing up in poverty are at risk for a number of negative outcomes, including poor academic achievement and violent behaviour (Copeland-Linder, Ialongo, and Lambert, 2010; Fergus and Zimmerman, 2005). Lower socioeconomic status (SES) is associated with high levels of risk-taking behaviour and increased psychosocial risk (Aklin et al., 2011; Bettge, et al., 2008; Graves and Stevens-Watkins, 2011; Millstein and Ingra, 1995, as cited in Cheng et al., 2009). Parental and peer risk-taking behaviours have also been found to increase the likelihood of risk-taking behaviour in youth (Cheng, et al., 2009). The erosion of adolescents' familial and social support networks effects their daily decisions. Youth who do not experience a sense of belonging at home, at school, or in their community sometimes seek such a connection in self-destructive ways through gang involvement, and poorly chosen friendships (Knop, et al., 2001). Adolescents from single-parent families are more at-risk of smoking, drinking alcohol, illicit drug use, being involved with weapon-related violence, and engaging in premarital sexual intercourse than those from two-parent families (Blum et al., 2000; Chou et al., 2006, as cited in Cheng et al., 2009).

Risk and Education

Research demonstrates that school performance is a cause of stress for adolescents (Friesen et al., 2009). Poor school performance often leads to students dropping out of high school. After interviewing 193 Canadian at-risk youth, Boydell et al. (2005) concluded that poverty was the main reason students dropped out of school. Boydell et al. (2005) describe at-risk youth as those who are "unlikely to graduate on schedule with the skills and self-confidence necessary to have meaningful options in the areas of work, leisure, culture, civic affairs and relationships" (p. 4). Other problems facing at-risk youth in schools include frequent office referrals, poor grades, and various forms of criminality (Bernard, 1993, as cited in Martinek, McLaughlin, and Schilling, 1999). Resnick et al. (1997, as cited in Cheng et al., 2009) found that poor school performance is related to interpersonal violence, suicidal tendencies, and the use of cigarettes and alcohol. Holloway and Salinitri (2010) considered at-risk youth from a critical literacy perspective. They suggest that students who are deemed at-risk in schools are a symptom of systematized discrimination rather than a cause of problems rooted in society and propose that marginalized groups such as English-language learners, and those with lower SES, confront systemic discrimination on a regular basis.

SES and family structure are related to student engagement (Friesen et al., 2009). Students who come from high SES backgrounds are found to have significantly higher levels of engagement, participation, sense of belonging, and attendance. Students from very high SES backgrounds are about one and a third times as likely to engage in school compared to those with very low SES backgrounds. Students from single–parent families are significantly less likely to engage in school than those from two–parent families. The differences between these two groups are especially pronounced for student attendance (Friesen et al., 2009).

Risk Trajectories

Fergus and Zimmerman (2005) outline four possible trajectories that may occur as a result of the interaction between vulnerability and risk. They define vulnerability as an increase in the likelihood of a negative outcome, typically as a result of exposure to risk. A normative trajectory occurs when low risk is present and a positive outcome results**.** An expected trajectory occurs when high risk is present and a negative outcome results. An unexpected trajectory occurs when low risk is present and a negative outcome results. A resilient trajectory occurs when there is high risk with a resulting positive outcome.

Resiliency

Definition

There is a long history of debate about the meaning of resilience. There is also debate as to whether resilience is best defined as a trait, a process, an outcome, a pattern of life, a course of development, narrow or broad, multi–faceted, multi-dimensional, short or long-term, and whether resilience should encompass recovery as well as resistance, internal as well as external adaptive functioning, and external as well as internal resources (Luthar, 2006; Masten, 1999; Masten and Obradovic, 2006, as cited in Masten, 2007). Werner (1996, as cited in Holloway and Salinitri, 2010) defined resilience as a set of qualities that help one adapt and achieve positive outcomes despite risk and adversity. Dumond et al. (2005) purport that resilience results from an individual constellation of characteristics and capacities, or as the result of interpersonal processes that mitigate the impact of biological, psychological, and social factors that threaten a child's health (Fraser and Galinsky, 1997; Kaplan, 1999, as cited in Dumond et al., 2005).

Luthar (2000, as cited in Copeland-Linder, et al., 2010) defines resiliency as a process involving positive adaptation despite exposure to adversity or significant stress. Richardson

(2002, as cited in Russell-Mayhew and Short, 2009) defines resiliency as the process of coping with adversity, change, or opportunity in a manner that results in the identification, fortification, and enrichment of resilient qualities or protective factors. Resiliency, according to Rutter (1985, 1999, as cited in Dolan and Rennie, 2010), can be conceptualized as a dynamic process involving an interaction between both risk and protective processes. According to Fergus and Zimmerman (2005) resilience refers to the process of overcoming the negative effects of risk exposure, coping successfully with traumatic experiences and avoiding the negative trajectories associated with risks. Using assets or resources to overcome risks demonstrates resilience as a process.

Researchers describe resilience as an outcome when they identify as resilient an adolescent who has successfully overcome exposure to risk. Resilience is a concept that explains the unexpectedness of pro-social outcomes in the face of adverse circumstances (Guilligan, 2000, as cited in Dolan and Rennie, 2010). Psychological resilience refers to effective coping and adaptation when faced with loss, hardship or adversity (Fredrickson and Tugade, 2004). Researchers and practitioners working within a resilience framework recognize that many adolescents who grow up in poverty exhibit positive outcomes. These adolescents may possess any number of pro-motive factors, such as high levels of self-esteem or the presence of an adult mentor, which help them avoid the negative outcomes associated with poverty.

According to Bernard (2006, as cited in Hurlington, 2010) resilience is a capacity that all youth have for healthy development and successful learning. She also states (as cited in Russell-Mayhew and Short, 2009) that resilience is a complex phenomenon that focuses on protective factors that contribute to positive outcomes despite the presence of risk, and devastating disadvantages in life. Fergus and Zimmerman (2005) propose that a key requirement of resilience is the presence of both risks and pro-motive factors that either help bring about a

positive outcome or reduce or avoid a negative outcome. They conceptualize resiliency as more than the absence of risk factors; it is the presence of protective factors or developmental assets. Scales et al. (2006, as cited in Russell-Mayhew and Short, 2009) conceptualize resiliency as the absence of problem behaviors as well as indicators of healthy adolescent development.

Unger (2010) conceptualizes resiliency as a strengths-based focus on thriving and positive development between at-risk child and family populations. He further claims that resiliency is the capacity of individuals to access resources that enhance their well-being, and the capacity of their physical and social ecologies to make those resources available in meaningful ways. Thus resilience is understood as a social construct that identifies processes and outcomes associated with what people themselves term as well-being (Resilience Research Centre, 2011). Similar to Unger, Fergus and Zimmerman (2005) claim that resilience theory, though it is concerned with risk exposure among adolescents, is focused on strengths rather than deficits. It focuses on understanding healthy development in spite of risk exposure. Resiliency will be defined, in the context of this study, as the ability to successfully adapt and overcome challenges under adverse conditions.

Characteristics of Resiliency

Resiliency research focuses on youth who show positive developmental outcomes despite experiencing adversity (Bettge, et al, 2008). Resilient youth are those who overcome challenging life conditions by gaining control over their lives and becoming responsible, productive citizens (Martinek, et al., 1999). Resilient youth are those who are emotionally healthy and able to successfully confront and negotiate a multitude of challenges, and effectively cope with obstacles, barriers or setbacks. They possess certain qualities or characteristics that differentiate them from youth who are not able to successfully meet these challenges or

effectively deal with personal setbacks. Resilient youth have a strong sense of self; they are

more likely to view personal mistakes or obstacles as challenges that they have the ability and

skills to successfully manage, as opposed to viewing themselves as incapable of coping.

Although they are aware of their vulnerabilities or weaknesses, they are also able to identify their

individual strengths (Brooks and Goldstein, 2000, as cited in Russell-Mayhew and Short, 2009).

Qualities that are found in resilient youth include: the ability to self regulate, a sense of hope,

self–worth, the ability to establish realistic goals and expectations, problem–solving skills, and

the presence of effective interpersonal skills and coping strategies (Brooks and Goldstein 2001;

Gardner et al. 2008, as cited in Russell-Mayhew and Short, 2009; Fergusson and Lynskey,

1996). Resilient youth are future–oriented and appear to possess an internal locus of control,

defining and focusing their energy on those aspects of their lives they have control over, as

opposed to focusing their attention on factors beyond their control (Bandura, 1994; Brooks and

Goldstein, 2001; Feinstein et al., 2008; Seginer, 2008, as cited in Russell-Mayhew and Short,

2009). Bell (2001) identifies more esoteric characteristics of resiliency: a sense of *atman* or true

self, developing *kokoro* or heart, also known as *indomitable fighting spirit,* having a totem–an

animal spirit that lives inside, and being able to cultivate *chi*, the Chinese word for internal

energy.

   Resilient individuals have optimistic, zestful, and energetic approaches to life, are curious and

open to new experiences, and are characterized by high positive emotionality (Bettge, et al.,

2008; Block and Kremen, 1996; Klohnen, 2006, as cited in Fredrickson and Tugade, 2004).

Fredrickson and Tugade (2004) also identify highly resilient individuals as eliciting positive

emotions through the use of humor (Werner and Smith, 1992), relaxation techniques (Demos,

1989; Wolin and Wolin, 1993), and optimistic thinking (Krumpfer, 1999). Resilient children

have a strong sense of optimism. They are autonomous problem-solvers who seldom display the passive behaviours associated with helplessness (Bernard, 1993, as cited in Martinek et. al.,1999).

The following characteristics of resiliency are identified by Christensen and Christensen (1997), Braff, Ellis, and Hutchinson (2001) and the authors of *From Risk to Resilience, Final Report for the Canadian Council on Learning* (2009): social competence, good problem-solving, good self-control, positive relationship with a caregiver or significant adult, ability to accept life's challenges, autonomy, a sense of purpose/belief in a bright future, a sense of belonging, and ability to positively contribute to the community. Bell (2001) identifies the following individual and interpersonal characteristics of resiliency from Apfel and Simon (1996), Coatsworth and Masten (1998) and Wolin and Wolin (1996) as: having curiosity and intellectual mastery, having compassion–with detachment, having the ability to conceptualize, obtaining the conviction of one's right to survive, possessing the ability to remember and invoke images of good and sustaining figures, having the ability to be in touch with affects, not denying or suppressing major affects as they arise, having a goal to live for, having the ability to attract and use support, possessing a vision of the possibility and desirability of restoring civilized moral order, having the need and ability to help others, having a broad affective range, being resourceful, being altruistic towards others, and having the capacity to turn traumatic helplessness into learned helpfulness. Mayer et al. (2011) propose that the personality structure of youth consists of five overall traits that affect resiliency; extraversion which is defined by activity, enthusiasm, assertiveness and self-confidence; agreeableness defined as concern and sensitivity towards others and their needs; conscientiousness defined as dependability, orderliness, precision and the fulfilling of commitments; neuroticism defined as proneness to

experience feelings of anxiety, depression, discontent, and anger; and intellectual openness defined as intellectual functioning, creativity, imagination, and social and cultural interest.

Models of Resilience

Three models of resilience explain how pro-motive factors operate to alter the trajectory from risk exposure to negative outcome. The compensatory model defines how protective factors have a direct positive effect on an outcome. The protective factor model assumes that protective factors moderate or reduce the effects of risk factors on negative outcomes. Thus the pro-motive factor counteracts or operates in an opposite direction of a risk factor and corresponds to the resiliency trajectory (Fergus and Zimmerman, 2005). For example youth living in poverty are more likely to commit violent behavior than youth not living in poverty, but adult monitoring of behavior may help mitigate the negative effects of poverty. This is also referred to as a protective model. In this model parental support operates as a protective factor because it moderates the effects of poverty on violent behavior. Protective factors may operate in several ways to influence outcomes.

The protective or compensatory model can be further deconstructed into two subset models, protective–stabilizing and protective–reactive models. A protective–stabilizing model refers to instances when a protective factor helps to neutralize effects of risks. Higher levels of risk are associated with higher levels of a negative outcome when the protective factor is absent. However there is no relationship between the risk and the outcome when the protective factor is present. For example, among youth whose parents do not provide adequate support or monitoring of risk factors, those without an adult mentor may exhibit delinquent behaviors, whereas those with a non-parental adult mentor may not. A protective–reactive model refers to instances when a protective factor diminishes, but does not completely remove the expected co-

relation between the risk and an outcome. The relationship between the risk and the outcome is stronger when the protective factor is absent.

A third model of resilience is the challenge model. This model suggests that exposure to low and high levels of risk are associated with negative outcomes, however moderate levels of risk exposure are related to less negative or positive outcomes. This model is based on the theory that adolescents who are exposed to moderate levels of risk are confronted with enough of the risk factor to learn how to overcome it, but are not exposed to so much of it that overcoming it is impossible. Low levels of risk can also be beneficial but only if the risk is challenging enough to elicit a coping response so that the individual will learn skills and resources needed to overcome the risk. For example if an adolescent is faced with failure they have the opportunity to develop the skills and access the resources needed to overcome the failure and achieve success. If an adolescent never faces failure, when failure eventually presents itself during adulthood, the individual will not have the skills or resources to successfully deal with failure so as to elicit a positive outcome from the experience. This model is similar in theory to Csiksmentmihalyi's (1997) idea of flow. Flow occurs when a challenge is presented that is just above the skill level of an individual.

The inoculation model is similar to the challenge model. The challenge model of resilience can be considered inoculation if it includes a developmental focus. This theory hypothesizes that continued repeated exposure to low levels of a risk factor helps the individual to mobilize assets and resources as they are exposed to adversity, thereby preparing the person to overcome more significant risks in the future. Fergus and Zimmerman (2005) suggest that compensatory, protective or challenge models can all operate within the inoculation framework as each model theorizes that successfully overcoming risk develops skills and resources that an individual can

use to successfully overcome further adversity they may face in their lives. Therefore resilience is seen as an ongoing developmental process.

Developing Resiliency

Individual and environmental risk exposure may be responsive to different assets and resources (Fergus and Zimmerman, 2005). Therefore the study of protective factors and developmental assets is needed in order to create interventions for youth that may mitigate the adverse affects of risk. Theorists who promote the development of protective factors to mitigate risk tend to come from a problem-based paradigm. These theorists first analyze which risk factors are present and then consider what protective factors may mitigate those risks. Theorists who aspire to the positive youth development theory tend to come from a strengths-based paradigm. These theorists analyze which assets and resources are required for optimal development for all youth.

Protective Factors and Positive Youth Development

The premise of resiliency is that people possess selective strengths, which are often referred to as protective factors, that help them survive adversity (Richardson 2002, as cited in Russell-Mayhew and Short, 2009). Protective factors enhance adolescents' abilities to resist stressful life events while adapting to the situation and developing competence in dealing with it. There are protective factors that either facilitate to bring about positive outcomes, or reduce or avoid a negative outcome in the presence of risk factors (Copeland-Linder, et al., 2010). Protective factors are positive characteristics, predispositions, and influences in adolescents' lives that can buffer them from the negative influences of risk (Catalano et al.,1998; Bernard 2002, as cited in Cheng et al, 2009).

The positive youth development (PYD) approach emphasizes assets and resources as a focus for change. The focus on interventions is to develop assets and resources for adolescents exposed to risk instead of the traditional approach of focusing on interventions to reduce risk (Fergus and Zimmerman, 2005). The PYD framework requires identification of specific developmental assets that are unique to the individual. It focuses on what developmental assets can be further developed or provided, as opposed to focusing on existing problems and deficits (Scales, 2005). Thus the PYD framework is a strength–based approach to adolescent development that identifies personal characteristics, positive relationships, and opportunities that impact and shape adolescents' healthy development (Russell-Mayhew and Short, 2009). Developmental assets and resources play an important role in the healthy development of young people across varied life circumstances and in the face of multiple challenges (Leffert and Scales, 1999, as cited in Cheng et al., 2009). Developmental assets and resources enhance developmental outcomes and provide a common language for communities and social systems.

The PYD framework differs from the risk and protective factors framework. Although the language and the science on which they are based are similar, the difference between the two approaches is more of emphasis and applied implication (Scales, 1999). A key difference is that asset development involves all children and youth and stresses the effect of informal daily interactions by community members as well as the impact of formal programs for youth. Another key difference is it focuses on mobilizing all community residents to play roles to collectively nurture young people, rather than only considering trained professionals who work with youth (Scales, 1999). The more assets a youth has, the more likely they are able to avoid risk behaviours (Evans et al., 2004; Leffert and Scales, 1999, as cited in Cheng et al., 2009). Thus developmental assets have a key role in the prevention of a range of high–risk behaviors

and set practical benchmarks for positive adolescent development (Mannes et al., 2005, as cited in Russell-Mayhew and Short, 2009).

Protective factors are divided into individual or environmental categories. Likewise PYD theory defines individual pro-motive factors as assets and external pro-motive factors as resources. Assets are the positive factors that reside within the individual such as: competence, coping skills, and self-efficacy. Resources are positive factors that help youth overcome risk that are external to the individual.

Lists of protective factors vary from study to study. These lists can be as detailed as identifying macro, meso, and micro levels of protective factors (Boydell et al., 2005) to a list of four categories (Christiansen and Christiansen, 1997). In the PYD literature tables categorizing and listing internal assets and external resources can be found (Centre for Resiliency Research, 2011; Dumond et al., 2005). A pivotal study conducted by the Search Institute (2011) identified 40 developmental assets and resources listed under eight broad categories. Internal assets tend to include the values, skills, and self-perceptions that young people need to develop in order to guide and regulate themselves, while resources tend to include external factors that enhance the relationship and opportunities that adults and peers provide for young people (Scales et al., 2006, as cited in Russell-Mayhew and Short, 2009).

Internal

Individual protective factors or assets include: cognitive and self-regulation skills, positive sense of self, and motivation to be effective in the environment (Harvard Medical Health Letter, 2006, as cited in Russell-Mayhew and Short, 2009). Good self-regulation skills, which include executive functioning, are needed in order to cope effectively with stress (Aspinwall and Taylor, 1997; Eisenberg et al., 1995, as cited in Cheng et al., 2009). Emotional regulation is one

component of self-regulation. Regulating emotions is an effective response for stress (Greenberg, 2006, as cited in Cheng, et al., 2009). Emotional regulation has the strongest positive correlation with adolescent health (Oshio et al., 2003, as cited in Cheng et al., 2009).

Self-efficacy, self-control and self-esteem are skills that are necessary for a positive sense of self, and are thought to play a protective role against the development of risk (Bettge, et al., 2008; Cheng et al., 2009; Mayer et al., 2011). Self-efficacy is the perceived ability to influence a specific outcome in one's life (Bandura, 1994). Bandura proposes that self-efficacy is the belief that difficult tasks are challenges to be mastered, rather than threats to be avoided. Self-efficacy fosters engagement, personal accomplishments, and enhances well-being. Self-efficacy plays a crucial role in the self-regulation of affective states (1994).

The relationship between self-efficacy and the mitigation of risk behaviours has been supported in many studies (Kim, 2001; Chang et al., 2006, as cited in Cheng et al., 2009). Cheng et al. (2009) suggest that self-efficacy training could be an important element in reducing risk behaviours of early adolescents, and that mastery experiences, vicarious experiences, verbal persuasion, and enhancement or reductions of physiological and affective states are all useful strategies to improve self-efficacy. Mayer et al.'s (2011) study demonstrates that self-efficacy is positively linked to self-control and self-esteem. Similar to self-efficacy, self-control pertains to youths' subjective beliefs about their ability to exert control over outcomes in important life domains (Weisz and Stipek, 1982, as cited in Mayer et al., 2011).

Self-esteem refers to feelings of worthiness and value as a person (Harter, 1985, as cited in Mayer et al., 2011). Self-esteem appears to form a protective buffer against adolescent substance use, teenage pregnancy, and suicidal ideation (Bearman and Moddy, 2004; Byrne and Mazanov, 2001, as cited in Cheng et al., 2009). According to Mayer et al. (2011) higher levels of self-

regulation, self-efficacy, self-control and self-esteem are associated with lower levels of emotional and behavioural symptoms in youth. The results of Cheng et al.'s study (2009) suggests that individual protective factors, specifically self-efficacy, self-esteem, and self-regulation, may be more important than environmental protective factors in influencing risk behaviours.

Other internal assets that may be particularly influential in fostering resiliency include social skills for relating to peers, including: conflict resolution skills, planning, problem-solving, academic skills, and participation in extracurricular and community activities (Hughes, 2006). Skill building for life in general, such as the development of generic social and problem–solving skills, can be just as important as building skills for risk avoidance. The ability to plan and problem-solve allows one to successfully address environmental challenges and enables an individual to have a sense of control over what happens to them (Rutter 1987, as cited in Hughes, 2006). Youth who have self–confidence and social skills are also somewhat predisposed to being resilient regardless of the risk or outcome. Researchers have found that adolescents are protected from substance use and the consequences of stressful or negative life events by assets such as self-esteem, an internal locus of control, positive effect, and religiosity (Fergus and Zimmerman, 2005).

Schrier et al. (1999, as cited by Fergus and Zimmerman, 2005) identify academic achievement, self–control, and substance–use refusal skills as internal assets that mitigate risk-taking behaviour for substance use. Academic achievement is a consistent protective factor for substance use. This asset helps protect against risks of low academic motivation and age–related increases in substance use.   Psychological well–being and social competence compensate for the effects of prior cigarette, alcohol and marijuana use for predicting current use among junior high

school students in New York City. Individual assets that compensate for substance use risks associated with peer influences are decision–making skills and positive orientation towards school. Assets that compensate for individual–level risk factors that may promote violent behavior include pro-social beliefs compensating for antisocial socialization, religiosity compensating for gang involvement, and anger control skills compensating for risk–taking behavior (Fergus and Zimmerman, 2005).

Dolan and Rennie's (2010) study was the first to examine both the type and number of protective factors needed to safeguard against re-offending by adolescents in custody. Their study involved male adolescents, the majority of whom had been involved in violent offenses, in custody in the UK. They identify a strong commitment to school as the one internal protective factor that was most commonly absent.   Only one internal protective factor is identified as the optimum number of protective factors needed to safeguard against re-offending.   This one internal protective factor is resilient personality traits. Resilient personality traits include: above average intellectual ability and cognitive skills such as reasoning, planning, and delay of gratification, the ability to develop solutions to problems, adaptability, calm mood, and realistic self-esteem (Kumpfer, 1999, as cited in Dolan and Rennie, 2010). This finding is also supported by Duits et al.'s research (2008, as cited in Dolan and Rennie, 2010). They suggest that resilient personality traits are a significant predictor of low to medium risk of re-offending. Dolan and Rennie's study identifies an enduring positive attachment with at least one pro-social adult as the most common external protective factor to safeguard against violent re-offending (2010).

External

Research demonstrates that social environmental influences can have a positive effect on adolescent health and development. This research places resilience theory in a more ecological

context and moves away from conceptualizations of resilience as a static individual trait. Protective social environments that provide refuge in high-risk situations include: peer, family, school, and community influences (Boydell et al., 2005; Hammond, 2011; Hughes, 2006; Hurlington, 2010; Russell-Mayhew and Short, 2009; Unger, 2010). According to Cheng et al. (2009) environmental protective factors refer to positive opportunities provided by adults in family, school, and the larger community. Oman et al.'s study (2002, as cited in Cheng et al., 2009), found that environmental influences such as: family communication, peer role models, and non-parental role models, each significantly related to at least seven youth risk behaviours. Fergus and Zimmerman (2005) found that across most risk factors for adolescent substance use, violent behavior, and sexual behavior, parental factors seemed to be particularly vital in helping youth be resilient. Community organizations that provide health-promoting settings for youth, extra-curricular involvement in school and community involvement that provides pro-social activities for youth to participate in with their peers, as well as parenting skills, specifically parental monitoring and communication skills, opportunities for family connectedness, family involvement in school, and opportunities for non-familial adult mentorship have been identified as key resources for positive youth development (Cheng et al., 2009; Fergus and Zimmerman, 2005). The Harvard Medical Health Letter (2006, as cited in Russell-Mayhew and Short, 2009) indicates that youth are protected by connections to competent caring adults in the community and family.

Regardless of which social environment children find themselves in, be it family, school, or community, research shows that three protective factors are essential: caring relationships, high expectations, and opportunities for meaningful contribution (Baxley, 1993; Fergusson and Lynskey, 1996; Friesen, et al., 2009; Hurlington, 2010). Each of these three protective factors

plays a crucial role in the creation of environments that foster the development of resilience. Positive development of children is nurtured through relationships that demonstrate care and support in practical and palpable ways. These caring relationships must acknowledge and build upon strengths within children. High expectations for both children's behaviour and performance of skills or tasks are essential because they help students understand that they have the capacity to be successful. Clearly delineated boundaries and rich resources that allow a child to reach beyond their independent abilities are necessary to support high expectations for children. It is also critical for young people to have opportunities for meaningful participation. Authentic tasks where youth can demonstrate their abilities in real-world settings and experience the rewards that come from benevolence provide the optimum opportunities for meaningful participation (Hurlington, 2010). These experiences also provide opportunities for the development and demonstration of new competencies, problem–solving, autonomy, helpfulness, and other positive attributes associated with resilience (Dumond, et al., 2005).

Relationships and Mentoring

Social cognitive theory asserts that individuals choose to emulate others that they perceive as similar to themselves. Therefore role modeling and mentoring may be important constructs in efforts to influence health-protective behaviours among adolescents (Grant et al., 2010). Research on adolescents, resiliency, education, and prevention, demonstrate that youth development is mediated by relationships with others (Hughes, 2006) suggesting that caring and supportive relationships with trusted adults are essential to healthy development. Hammond (2011) suggests that mentors need to facilitate interventions designed to increase resilience as 80% of a change factor in youth is due to relationships.

Resilient youth experience unconditional acceptance from at least one significant adult in their lives (Goldstein and Brooks, 2002, as cited in Russell-Mayhew and Short, 2009). Scales (2006, as cited in Russell-Mayhew and Short, 2009) suggests that nonfamily adults can also impact resilience. Research confirms that relationships with adults outside of young people's families that are characterized by: empathy, trust, attention, understanding, affirmation, respect, and virtue, provide adolescents with a number of developmental assets (Brooks 2006, as cited in Russell-Mayhew and Short, 2009). The role of nonfamily adults in relation to resiliency is important for single parents, or families who either do not have extended families, or are simply not able to connect with family members due to finances, proximity, or other barriers (Russell-Mayhew and Short, 2009).

A role model is an individual who is perceived as exemplary or worthy of identification or imitation, and their selection can reflect critical elements of psychosocial functioning and self-perception in adolescents (Grant et al., 2011). Supportive role models that youth can identify with and rely on can improve youth development in a number of behaviour areas. Several empirical studies support the positive effect of role models on certain measures of resilience. For example having a role model has been linked to a more positive ethnic identity, higher self-esteem, higher academic performance, decreased substance use, fewer behavioural problems in school, higher levels of physical activity and lower levels of engagement in early or high-risk sexual activity. Teens from lower income households are less likely to report a role model than their more affluent peers (2011). Therefore it is important for role models to be accessible for youth from families at lower SES levels.

Mentors are a distinct subset of role models. Mentors deliberately support, guide, and shape individuals younger or less experienced than themselves as they experience difficult periods,

enter new arenas, or undertake challenging tasks. Mentors tend to be both directly known and deliberate in their actions toward mentees. Research has indicated that adolescents with a mentor were more likely to engage in positive health behaviours and avoid detrimental behaviours in comparison with those without a mentor (Grant et al., 2011).

Mentors display acceptance through collaboration, a willingness to compromise, and efforts to support youth and explore their own personal goals and endeavors (Goldstein and Brooks, 2002, as cited in Russell-Mayhew and Short, 2009). In order for mentoring and learning to be sustained, the mentoring relationship needs to be built on mutual trust and respect (Hargreaves and Fullan, 2000, as cited in Holloway and Salinitri, 2010). Mentorship provides youth with the following pro-motive assets: a sense of belonging, increased self-esteem by allowing the adolescent to be heard and affirmed, and effective communication skills that enable youth to establish meaningful connections and interpersonal relationships (Goldstein and Brooks, 2002, as cited in Russell-Mayhew and Short, 2009; Grant et al., 2011; Martinek, et al., 1999; Scales, 2005). A successful mentoring relationship enables the mentee to learn and grow in a safe and protected environment (Holloway and Salinitri, 2010). Mentoring allows for the fostering of resiliency by teaching goal–setting strategies, and encouraging optimism (Martinek, et al., 1996).

A mentor is uniquely positioned to engage youth in self-exploration and awareness. Mentors stand outside the family struggle so that youth can more easily accept their guidance but at the same time, unlike peers who lack experience, they have the capacity and intellect to fully assist youth with identity–related issues. The results from a study of the Big Brothers and Big Sisters mentoring program demonstrate that individuals who have higher baseline functioning, intense interests, and strong relationships in the past benefited the most from mentoring (Rhodes, 2002, as cited in Hughes, 2006).

Mentoring relationships have also been found to affect academic success.   Engaging in conversation, dialogue, and listening is important for developing critical thinking, broadening worldviews, and being open to, and interested in, ongoing learning of new ideas (Rhodes, 2002; Small and Memmo, 2004, as cited in Hughes, 2006). Research conducted by Scales (2006, as cited in Russell-Mayhew and Short, 2009) indicated that young people who had nonfamily adult mentors from middle school to high school experienced higher levels of thriving in high school than other students. Boydell et al. (2005) found that one caring adult in the school system can prevent dropout.

Mentoring helps at–risk students to feel individually empowered. In Holloway and Salinitri's study (2010) at-risk students showed improvement in terms of attendance and general engagement, however, mentoring in the study did not significantly affect grades. Analysis of the relationship between SES levels and emotional and academic outcomes of students in schools across Canada suggest that the role of the classroom teacher may be more important than students' family background in affecting student achievement (Willms, 2003, 2006, as cited in Friesen et al., 2009).

Gender Differences

Cheng et al.'s (2009) research found that female adolescents had lower risk behaviour scores than males. Therefore the researchers concluded that male adolescents should be considered an at-risk group for intervention. This finding is consistent with previous studies on gender differences and risk (Blum et al., 2000; Chou et al., 2006; Wallace et al., 2002, as cited in Cheng et al., 2009).

According to Scales (1999) neither risk nor assets are equally distributed between males and females. Males are at greater risk than females for problem alcohol use, antisocial behavior,

gambling, and violence. Females are at greater risk for depression and suicide attempts.

Females also have more assets than males (Scales, 2005). Clarke's (1995) review of gender

differences with respect to risk and resiliency found that caring relationships with particular

teachers and school personnel were critical for girls. Thus mentoring programs within the school

environment provide strong protective factors for girls.

Recent national and international studies regarding boys in school have demonstrated that

boys are struggling and falling behind. Boys have more behaviour problems in school and are

more likely to be suspended or expelled than girls. Boys are more frequently absent from school.

Boys are more likely to be referred to a school psychologist and more likely to be placed in

special education programs. When they are placed in special education programs, boys are more

likely to be diagnosed as emotionally disturbed and to be assigned a special behaviour category.

With the exception of sports, boys receive fewer awards for participation in leadership building

activities. More girls are achieving higher marks in all curriculum areas and are less likely than

boys to have failing grades. Boys tend to score lower on standardized tests in language arts.

Girls outnumber boys in gifted programs, honour roll, and scholarships, and boys are less likely

to go to university and more likely to drop out of school. Other issues that boys face are: they

are 50% more likely to be physically abused by their parents; there are more males in prisons

than females; and women outlive men by about five years (EQAO, 2011; Klinger et al., 2009;

Lawson, Nagy, Penfield, 1999; MacDonald, 2005; Ministry of Education, 2011; Slocumb, 2004).

The Role of Schools

Schools can play a vital role in developing resiliency for at-risk students as they can create

many of the pro-motive factors needed by the student that they may not be able to access in other

environments. School climate itself has been identified in the literature as a resource that

promotes resiliency for youth (Friesen et al., 2009; Martinek et al., 1999; Russell-Mayhew and Short, 2009; Scales, 2005). The importance of providing educational programming that will assist youth in developing resiliency is demonstrated in research conducted by Scales (2005) who found that assets during the middle school years tend to decline. In fact the average number of the Search Institute's 40 assets steadily dropped from a high of 23.1 in grade 6 to 19.6 by grade 8, with a further drop and leveling at about 18. Internal assets bottomed out in ninth or 10th grade, and then started a slight recovery, but internal assets that families, schools, and communities can more directly provide, kept declining until the 11th grade (Benson et al., 2003, as cited in Scales, 2005). This finding that assets and resources bottom out in the grade 10 year is also supported by Hammond (2011). Scales (2005) suggests that the decline may be due to a lack of fit between the growing empowerment, co-regulation, and meaningful participation that students want and need, and the way that schools are organized, how school rules are set, and the approaches used to promote learning. Raising students' assets happens by affecting overall school culture across the major functions of school organization, curriculum and instruction, co-curricular programs, community partnerships, and support services (Starkman et al, 1999, as cited in Scales, 2005). Therefore in order for a school environment to assist youth in developing resiliency and increasing, rather than decreasing developmental assets, a change in the structure of how schools traditionally provide programming may be needed. There is much less information known about programs that are aimed at helping youth to develop positive connections with others, as well as building motivation and competency (Larsen, 2000, as cited in Hughes, 2006).

A partnership between the University of Windsor and the Windsor-Essex Catholic District School Board was formed with the intent of creating an environment and structure in secondary

schools that would foster resiliency in at-risk youth. This school-based program targeted grade 10 at-risk students as the critical grade in which intervention is needed. The program has been in operation for six years. The purpose of this research study is to determine whether or not the intervention is meeting its program objectives.

CHAPTER III

METHODOLOGY

Design

I have chosen to use both a post-positivist and constructivist approach in this study. Post-positivism is based on determinism or cause and effect thinking; reductionism by narrowing and focusing on select variables to interrelate; detailed observations and measures of variables; and the testing of theories that are continually refined (Creswell, and Clark Plano, 2010). This perspective was used in selecting and using an instrument to measure the development of resiliency through the Discovering Your Possibilities program (the intervention), and to test whether the other outcome of the intervention, improvement in academic success, was met. The Resiliency Skills and Aptitude Profile (RASP), developed by Allen and Hurtes (2001), was used to measure resiliency, a multifaceted construct that develops over time (Appendix A). This was a self-report measure.

A constructivist perspective was then used to triangulate the data. Constructivism is based on understanding phenomena through the subjective views of participants (Creswell and Clark Plano, 2010). Since the philosophical assumptions in the study shift and change from post-positivist to constructivism, I have chosen to use an explanatory mixed methodology design. According to Creswell and Clark Plano (2010), an explanatory mixed methods design provides the researcher with the opportunity to use quantitative data to examine results, and use qualitative data to further explore quantitative findings. It also allows the researcher to mix philosophical approaches.

Null Hypothesis and Research Questions

The study sought to assess the null hypothesis with the following statements:

1. There is no relationship between academic performance, as indicated by student

   engagement, and the intervention.

2. There is no relationship between resiliency and the intervention.

 The following research questions were also asked in the study:

1. Does the *Discovering Your Possibilities* (DYP) program increase the level of academic

   success, as identified by student engagement: increase in attendance, decrease in the

   number of times late for class, improved credit accumulation, increase in grade point

   average (GPA), and the level of resiliency in at-risk youth?

2. The following question was also investigated in this study through interviews: what

   elements in the program contributed to resiliency (if any)

   a) from the perceptions of the students?

   b) from the perceptions of the Student Success Teachers (SSTs)?

Procedures

A sequential explanatory mixed methods design was used in this study. This research design

begins with a quantitative phase that is followed by a qualitative phase that explains the initial

results in more depth. This is also called a qualitative follow–up approach (Morgan, 1998, as

cited in Clark and Creswell, 2010). The qualitative data in this study was used to triangulate the

RASP since it is a self-report measure. Students and SST's perspectives were investigated to

look at the development or lack thereof of resiliency, a complex construct, through the

intervention, in more detail than what the RASP assesses. According to Clark and Creswell, the

sequential explanatory design is most useful when the researcher wants to assess trends and/or

relationships with quantitative data and explain reasons behind those trends and/or relationships.

Sequential explanatory research design also allows the researcher to interpret to what extent and

in what ways the qualitative results explain an added insight into quantitative results and over all what is learned in response to the study's purpose. Thus the mixing of quantitative and qualitative methods results in higher inferences (2010).

This study involved a pretest, an intervention and a posttest, as well as comparison of student achievement data such as cumulative attendance, the number of times late for class, credit accumulation and GPA from the conclusion of the first year of high school to the conclusion of the second year of high school. Audio interviews of students and SSTs were conducted in order to assist in explaining the quantitative data from the students' and SSTs' perspectives. Specifically, the interviews assisted the researcher in better understanding if and how the intervention contributed to resiliency.

The RASP was selected due to its strengths-based perspective and its design. The measures are simple, easy to administer and interpret, and appropriate for adolescent populations. The even number of response items force respondents to make a choice, thus encouraging respondents to identify their true feelings (Allen and Hurtes, 2001).

The seven dimensions of resiliency assessed on the RASP are based on Wolin and Wolin's qualitative research on resiliency (2001). Creativity is defined as the ability to generate alternatives, to cope with the challenges of life, and to imagine the consequences of one's actions in the decision-making process. Humor is the ability to laugh at oneself and find joy in one's surroundings, thus enabling one to more easily bear the hardships of life. Independence involves striking a balance between being true to oneself and accommodating the concerns of others as well as a positive, optimistic orientation toward the future and an ability to say no when appropriate. Initiative involves the desire and determination to take charge of one's own life; to believe that one has the power to meet and overcome life's challenges. Insight is defined as the

ability to read and interpret situations, people, and subtle nuances of both verbal and nonverbal communication. Peer, family and role model relationships that are honest, fulfilling and supportive define the subscale of relationships. Values orientation includes a basic knowledge of right and wrong, the desire to live a good and productive life, to serve others in need, and to make one's own decisions rather than accepting someone else's rules. It also involves being able to identify what is appropriate, and the courage to stand by one's convictions (2001).

Content validity was assessed through a two-phase modified Delphi expert review process. Construct validity was assessed through structural equation modeling (*SEM*) with data from one site. The model was then cross-validated using data from a second site. To assess convergent validity, a modified version of the Mental Health Inventory (Veit and Ware, 1983, as cited in Allen and Hurtes, 2001) was utilized with data from the second site. Analysis of the RASP model produced a *chi-square/df ratio* of 1.71. *Bentler's CFI* was .85. Each of the seven subscales of the RASP loaded significantly on the overall concept of resiliency. The stability of the RASP across administrations was also assessed. The findings suggested that the RASP consistently measures the same construct over time (2001).

The assessment of internal consistency was conducted by computing Cronbach's Alpha for each of the seven subscales and the entire RASP. The entire RASP achieved an alpha coefficient of .91 indicating strong internal consistency for the total scale. Alpha levels for the seven subscales were lower: creativity=.68, humour=.49, independence=.62, initiative=.53, insight=.6, relationships=.71, and values orientation=.68. The authors suggest that these lower values may be due to the fact that each of the seven subscales is multidimensional in and of itself, which would directly reduce internal consistency (2001). The authors conclude with suggesting a need to utilize multiple methods when investigating resiliency. They specifically

suggest that focus groups and/or interviews be conducted to identify respondents'

conceptualizations of the seven subscales of resiliency, thus reinforcing the need for an

explanatory research design in this study.

Participants/Research Site

Purposive sampling was used. The subjects in this study consisted of 59 students: 28 from an

inner city high school, 14 males and 14 females; 16 from an east end suburban high school,

seven males and nine females; and 15 from a west end core city high school, seven males and

eight females. These students were aged 15 to 16 years old, were in their second year of high

school, and had been identified as at-risk by the SST. At-risk criteria included some or all of the

following: academic performance at level one or below as described on curriculum achievement

charts, a demonstrated weak foundation as indicated on the Learning Skills performance rating

on the provincial report card, a history of emotional and/or social problems, poor school

attendance, engagement in unhealthy risk-taking activities, a member of a low-income family.

Students who participated in the program became the participants for this study.

In September the SST met individually with the students and read a script provided by the

researcher to invite the students to participate in the intervention and in the study. Consent and

assent forms were given to the students with a deadline to return the forms. Once the signed

forms were returned, the SST informed the researcher as to the number of participants secured

for the study (Appendix B).

SSTs at each of the above school sites were invited to participate in the study. Of the three

SSTs, two were female and one was male and all had 10 or more years of teaching experience.

One female teacher had been a SST since the inception of the role in 2005. The other two

teachers had been SSTs for two years.

Data Collection

Quantitative Data

a) **RASP**

Once all consent and assent forms for the intervention and study were returned, the SST set up a meeting with the student study participants to complete the RASP. This task was completed prior to the first activity of the intervention. In preparation for this meeting, the SST assigned each participant a code so that the researcher would not be able to identify any student with the survey. The code began with the 1st alphabetic letter of the name of the school, followed by a numeric number. The SST set a meeting date for completion of the RASP and informed the participants of the date, time and location of the meeting. The SST was provided with copies of the RASP, one for each participant.

At the meeting the SST read a script provided by the researcher that outlined instructions for completing the survey (Appendix C). The SST distributed the surveys and assigned each student their code. The student wrote that code on the top left hand corner of the survey. Students completed the survey, handed them in to the SST who sealed them in an envelope. The SST concluded this meeting by providing information to the participants regarding the date, time and location of the next activity for the intervention.

An alternative date was set for those students who were absent the day of the survey to insure all participants who had consented to participate in the study completed the survey before the intervention began. The completed surveys were submitted to the researcher who kept them in a locked cabinet in her office.

At the conclusion of the intervention the SST set up a meeting to facilitate the completion of the posttest. In preparation for this meeting, the SST reviewed the codes that were assigned to

each student, and assigned a new code for the posttest. The code for the posttest corresponded to the code on the pretest. The second code began with the number 2, followed by the code on the pretest. The SST copied the RASP on coloured paper for the posttest administration of the survey. This insured that the pre and post test would not be confused.

The SST read the script provided by the researcher that outlined instructions for completing the post RASP and assigned a new code to each student (Appendix D). The student placed that code on the top left hand corner of the survey. Students completed the survey, handed them in to the SST who sealed them in an envelope. An alternative date was set for completion of the posttest RASP for students who were absent. The completed surveys were submitted to the researcher who kept them in a locked cabinet in her office. Raw scores of the pre and post RASP survey were recorded on an excel spreadsheet which was transferred to Statistical Package for the Social Sciences (SPSS) for analysis.

b) Academic Success Data and Attendance in the Intervention

Academic data was collected using Excel spreadsheets and then transferred to SPSS. These spreadsheets contained the following information:

- Student RASP code

- Gender of student

- Total days absent in grade 9

- Total days absent in grade 10

- Total number of times a student was late for classes in grade 9

- Total number of times a student was late for classes in grade 10

- Total number of credits attained in grade 9

- Total number of credits attained in grade 10

- GPA from grade 9

- GPA from grade 10

The SST completed the spreadsheets containing the academic success data to insure participants' anonymity and submitted that data to the researcher.

Throughout the intervention the SST kept a record of each participant's attendance in the intervention activities using an excel spreadsheet. This spreadsheet recorded the students' code from the RASP survey to identify the student as well as the dates and types of activities of the intervention. This spreadsheet was submitted to the researcher who transferred the information to SPSS for analysis.

Qualitative Data

Interviews

Peer selection was the method used to select two students for an audio taped interview at each study site. The peer selection process took place immediately after the posttest was completed. Once the post RASP was collected, the SST distributed a piece of paper to each student. The SST read a script provided by the researcher that reviewed the definition and characteristics of resiliency skills that the RASP assessed. Each student was then asked to write down the name of one male and one female student who could best talk about the activities in the intervention that contributed to resiliency skills (Appendix E).

The SST collected the papers from the students and determined which male and which female were selected by their peers to be interviewed by the researcher. The SST asked the identified students if they were willing to be interviewed. All students agreed to be interviewed.

The SST met with the students who agreed to be interviewed and read the script provided by the researcher regarding the audio interviews and distributed the required consent and assent

forms. The SST also informed the students of the date the signed forms must be returned, as well as the date, time and location of the interview. The SST reminded the students how important it was that they were present at school the day the interview was scheduled. The SSTs were also interviewed. Consent forms were distributed to the SSTs to sign and return to the researcher (Appendix F).

The interviews were set up over two days. The students were interviewed first. Then the SST was interviewed. A digital recorder was used to record all interviews. Interviews were transcribed after the interviews were concluded. Inductive and co-occurring coding was used to analyze the interviews and to derive common themes (Appendix G).

CHAPTER IV

FINDINGS

Quantitative Data Analysis

Descriptive statistics were conducted through SPSS to compare raw scores of pre and post

data (grade 10 compared to grade 9) to investigate if there was an improvement in students'

academic success as measured by the following student engagement variables: attendance,

number of times late for class, credit accumulation, and GPA, and to compare pre and post

RASP survey results to investigate whether or not students' level of resiliency improved.   An

analysis of variance (MANOVA) test was conducted to assess the null hypothesis that there is no

relationship between academic success and the intervention, and that there is no relationship

between resiliency and the intervention.

An investigation of the possible impact of gender on academic data, resiliency results and

attendance in the intervention was completed through a comparison of descriptive statistics and

an analysis of a MANOVA. Descriptive statistics and Pearson-Product Moment Correlations

were conducted to investigate the correlation between attendance in the intervention and

academic measures and resiliency scores. A MANOVA was also conducted to test for statistical

significant differences between attendance in the intervention and academic measures, and

resiliency scores.

Academic and Resiliency Measures

Table 1 - Descriptive Statistics - Academic and Resiliency Measures

Variable	M	SD
Absences Grade 9	19.122	17.033
Absences Grade 10	24.339	19.472
Lates Grade 9	14.2	13.615
Lates Grade 10	18.14	18.367

Credit Accumulation Grade 9	7.02	1.266
Credit Accumulation Grade 10	6.517	1.692
Grade Point Average Grade 9	60.669	8.246
Grade Point Average Grade 10	59.323729	9.650
Pre-test Resiliency	4.247	.674
Post-test Resiliency	4.3687	.831

[a] n=59

Descriptive statistics for academic measures for all 59 study participants, as noted in Table 1,

revealed that the difference of means in grade 10 compared to grade 9 were: an increase of 5.22

absences, an increase of 3.94 times late for class, a decrease of .50 for credit accumulation, and a

decrease of 1.35 for GPA. The difference of means between the pre and post RASP survey

results indicates an increase of .12.

Table 2 – Pre and Post Data All Students – Greenhouse-Geisser Test Results

Variable	F-Test	Significance
Absences	10.765	.00*
Lates	6.169	.02*
Credit Accumulation	4.371	.04*
Grade Point Average	0.664	.42
Resiliency	0.948	.34

Note. Degrees of freedom for each variable is 1.
[a] n=59
[b] *$p<.05$

A Greenhouse-Geisser MANOVA test was conducted to assess the null hypothesis that there

is no relationship between academic success and the intervention, and that there is no

relationship between resiliency and the intervention. As demonstrated in Table 2, there were

statistically significant differences for all students in grade 10 compared to grade 9 for: absences

($p=.002<p=.05$), number of times late for class ($p=.016<p=.05$), and credit accumulation

($p=.041<p=.05$). There was no statistically significant differences for all students in grade 10

compared to grade 9 for GPA ($p=.419>p=.05$), and between pre and post RASP survey results ($p=.335>p=.05$).

Table 3 - Credit Accumulation Grade 9 - Percentage of Sample Population

		Frequency	Valid Percent	Cumulative Percent
Valid	3	2	3.4	3.4
	4	1	1.7	5.1
	5	3	5.1	10.2
	6	11	18.6	28.8
	7	13	22.0	50.8
	8	29	49.2	100.0
	Total	59	100.0	

[a] $n=59$

Table 3.1 -Credit Accumulation Grade 10- Percentage of Sample Population

		Frequency	Valid Percent	Cumulative Percent
Valid	2.0	1	1.7	1.7
	2.5	1	1.7	3.4
	3.0	4	6.8	10.2
	4.0	3	5.1	15.3
	5.0	4	6.8	22.0
	6.0	6	10.2	32.2
	6.5	2	3.4	35.6
	7.0	17	28.8	64.4
	8.0	21	35.6	100.0

		Frequency	Valid Percent	Cumulative Percent
Valid	2.0	1	1.7	1.7
	2.5	1	1.7	3.4
	3.0	4	6.8	10.2
	4.0	3	5.1	15.3
	5.0	4	6.8	22.0
	6.0	6	10.2	32.2
	6.5	2	3.4	35.6
	7.0	17	28.8	64.4
	8.0	21	35.6	100.0
	Total	59	100.0	

[a] *n=59*

As noted in Table 3 and Table 3.1, this at-risk cohort follows the provincial trend of their

peers. The provincial credit accumulation trend for the last three years has been a downward

trend; credit accumulation decreases in the grade 10 year compared to the grade 9 year. In

Ontario, the percentage of students who achieved eight credits in grade 10 compared to the

percentage of students who achieved eight credits in grade 9 is: 2007/8- 69.1 to 79.8; 2008/9-

71.2 to 80.9; 2009/10- 72.6 to 81.8. WECDSB results follow this trend: 2007/8- 73.6 to 81.6;

2008/9- 74.9 to 80.9; 2009/10- 71 to 82.7 (Ministry of Education, 2011). In this study sample

the percentage of students who achieved eight credits in grade 10 compared to the percentage of

students who achieved eight credits in grade 9 in 2010/11 was: 35.6 to 49.2. At-risk data for the

2010-2011 school year was not available for either the province or the Board.

Gender Differences

According to descriptive statistics the difference of means in grade 10 compared to grade 9

for gender differences, and academic success and resiliency measures, indicated that males

increased their absences by 5.14 days whereas females increased their absences by 4.83 days.

Males increased the number of times they were late for class by 4.54 times whereas females

increased the number of times they were late for class by 4.16. Males decreased the number of

credits they accumulated by .42 whereas females decreased the number of credits they

accumulated by a mean of .44. Males decreased their GPA by .12 whereas females decreased

their GPA by 1.8. Males increased their level of resiliency by .08 whereas females increased

their level of resiliency by .15.

The Greenhouse-Geisser test was conducted to compare gender to academic success and

resiliency measures. No statistically significant difference was evident: attendance

($p=.92>p=.05$), number of times late for class ($p=.92 >p=.05$), credit accumulation

($p=.98>p=.05$), GPA ($p=.48>p=.05$), and resiliency ($p=.78>p=.05$). Therefore the intervention

did not have a gender bias.

Effect of Attendance in the Intervention and Academic and Resiliency Measures

Table 4 - Pearson Product-Moment Correlations – Attendance in Intervention and Academic Success Measures

		Absences-10	lates-10	activity attendance	credit accumulation-10	GPA-10
absences-10	Pearson Correlation	1	.427**	-.554**	-.644**	-.516**
	Sig. (2-tailed)		.001	.000	.000	.000

lates-10	Pearson Correlation	.427**	1	-.490**	-.501**	-.477**
	Sig. (2-tailed)	.001		.000	.000	.000
activity attendance	Pearson Correlation	-.554**	-.490**	1	.613**	.433**
	Sig. (2-tailed)	.000	.000		.000	.001
credit accumulation -10	Pearson Correlation	-.644**	-.501**	.613**	1	.857**
	Sig. (2-tailed)	.000	.000	.000		.000
GPA-10	Pearson Correlation	-.516**	-.477**	.433**	.857**	1
	Sig. (2-tailed)	.000	.000	.001	.000	

[a] **Correlation is significant at the 0.01 level (2-tailed)

According to the Pearson Product-Moment Correlations test noted in Table 4, as attendance in the intervention increased the following measures decreased: absences ($p=.000<p=.05$), and the number of times late for class ($p=.000<p=.05$). As attendance in the intervention increased the following measures increased: credit accumulation ($p=.000<p=.05$), and GPA ($p=.000<p=.05$). Therefore the intervention positively affected the academic success measures of attendance, number of times late for class, credit accumulation and GPA.

Table 5 – Frequency of Attendance in Intervention

Valid	Frequency	Valid Percent	Cumulative Percent
Lowest third	20	33.9	33.9
Middle third	20	33.9	67.8
Highest third	19	32.2	100.0

Table 6-Descriptive Statistics - Attendance in Intervention and Academic Success and Resiliency Measures

Measure	Split by thirds	Mean	Std. Deviation
absences-9	Lowest third	26.865	17.435
	Middle third	17.125	16.434
	Highest third	9.237	6.4321
	Total	17.405	15.6846
absences-10	Lowest third	38.529	18.3494
	Middle third	18.025	14.4791
	Highest third	12.5	8.0381
	Total	22.375	17.6847
lates- 9	Lowest third	22.18	17.671
	Middle third	14.05	10.851
	Highest third	6.74	6.975
	Total	14.04	13.65
Lates-10	Lowest third	35.24	22.038
	Middle third	14.05	13.04
	Highest third	7.84	7.661
	Total	18.38	18.768
credit accumulation-9	Lowest third	6.35	1.656
	Middle third	7.1	1.021
	Highest third	7.58	0.769
	Total	7.04	1.264
credit accumulation-10	Lowest third	5.088	1.8391
	Middle third	6.975	0.9797
	Highest third	7.579	0.6925

	Total	6.607	1.6003
GPA-9	Lowest third	57.565	8.89297
	Middle third	59.735	6.5759
	Highest third	64.589	7.8907
	Total	60.723	8.18073
GPA-10	Lowest third	53.288	8.87615
	Middle third	60.88	7.58306
	Highest third	64.211	8.764
	Total	59.705	9.3895
resiliency-pre	Lowest third	4.2742	0.7055
	Middle third	4.2258	0.71648
	Highest third	4.213	0.6367
	Total	4.2361	0.67489
resiliency-post	Lowest third	4.3338	0.89799
	Middle third	4.358	0.7933
	Highest third	4.3608	0.84617
	Total	4.3516	0.82853

[a] *n*=17 lowest third
[b] *n*=20 middle third
[c] *n*=19 highest third
[d] *n*=59 total

In reviewing Tables 5 and 6, it is evident that there are notable differences between the data

for all students and the data for students who attended two-thirds of the intervention. The

difference of means in absences for the middle third increased by .9 days, the highest third

increased by 3.26 days whereas all students increased by 5.22 days . There was no difference of

means in the number of times late for class for the middle third, the highest third increased by 1.1

lates whereas all students increased by 3.94 lates. The difference of means in credit

accumulation for the middle third decreased by .13 credits, there was no difference of means for the highest third whereas all students decreased by .5 credits. The difference of means in GPA for the middle third increased by 1.15 percentage points, the highest third had a decrease of .38 percentage points, whereas all students decreased 1.35 percentage points. The difference of means in resiliency from the beginning of the intervention to the end of the intervention for the middle third increased by .13, the highest third increased by .15, whereas all students increased by .12.

Table 7 - Greenhouse Geisser Test – Effect of Middle and Highest Third Attendance in Intervention on Academic Success and Resiliency Measures

Measure	F	Sig.
absences	5.261	0.01*
lates	6.714	0.00*
credit accumulation	4.186	0.02*
GPA	1.908	0.16
resiliency	0.051	0.95

Note. Degrees of freedom
for each variable is 1.
[a]n=39
[b]*p<.05

Table 7 demonstrates that there were statistically significant differences for students who had middle and highest third attendance in the intervention for the following academic success measures in grade 10 compared to grade 9: attendance (p=.01<p=.05), number of times late to class (p=.00<p=.05), and credit accumulation (p=.02<p=.05). There were no statistically significant differences in GPA (p=.16>p=.05) and in pre and post RASP survey results (p=.95>p=.05). It is important to note that each of these areas were more statistically significant than for all students in: number of times late for class (p=.05<p=.05), credit accumulation (p=.04<p=.05), and GPA (p=.31>p=.05). Therefore the more students participated in the

intervention, the more their academic success improved. Complimentary graphs are provided in

Appendix H.

Gender Differences and Attendance in the Intervention

   In analyzing descriptive statistics for gender differences in attendance in the intervention, it

appears that more males tended to be in the middle third of attendance and more females tended

to be in the bottom or top third of attendance in the intervention. There were no statistically

significant differences between gender and attendance in the intervention.

Resiliency Subscales

Table 8 – Cronbach's Alpha Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
.897	34

Table 8 demonstrates the reliability of the RASP scale in this study with a Cronbach's Alpha of

.897>.8.

Table 9 – Descriptive Statistics - RASP Subscales

Measure	Mean	Std. Deviation
creativtiy pre	3.924	0.9739
creativtiy post	4.1287	1.0015
humour pre	4.0819	1.0376
humour post	4.3596	1.05681
independence pre	4.3751	0.69233
independence post	4.4749	0.81669
initiative pre	3.8348	0.8612
initiative post	4.117	1.0206
insight pre	4.3188	0.8214
insight post	4.436	0.905

relationships pre	4.3895	0.9628
relationships post	4.3871	0.97012
values pre	4.4591	0.92127
values post	4.4532	1.15169

[a] *n=57*

Table 9 provides information on the differences of means for the RASP subscales from the

beginning of the intervention to the end. Creativity increased by .21, humour increased by .30,

independence increased by .09, initiative increased by .29, insight increased by .12, there was no

change with relationships, and values orientation decreased by .01.

 The Greenhouse-Geisser test was conducted on the pre and post data for the subscales of the

RASP to test for statistically significant differences from the beginning to the end of the

intervention. Initiative was the only subscale that demonstrated a significant difference. The *p*

value was .05 which demonstrates a borderline significance ($p=.05=p=.05$).

Gender Differences and RASP Subscales

Table 10 – Descriptive Statistics - Gender Differences and RASP Subscales

Measure	Gender	Mean	Std. Deviation
creativtiypre	Male	3.9753	.89598
	Female	3.8778	1.05221
creativtiypost	Male	4.0617	.94750
	Female	4.1889	1.06019
humourpre	Male	3.9259	1.14105
	Female	4.2222	.93191
humourpost	Male	4.2716	.81144
	Female	4.4389	1.24605

independencepre	Male	4.1790	.76855
	Female	4.5516	.57270
indepenpost	Male	4.3986	.71647
	Female	4.5437	.90412
initiativepre	Male	3.7438	.99140
	Female	3.9167	.73239
initiativepost	Male	3.9599	.86891
	Female	4.2583	1.13617
inisghtpre	Male	4.2956	.94588
	Female	4.3397	.70694
inisghtpost	Male	4.4175	.86135
	Female	4.4524	.95754
relationshipspre	Male	4.3173	.98516
	Female	4.4544	.95430
relationshipspost	Male	4.2481	.92622
	Female	4.5122	1.00701
valuespre	Male	4.3580	1.09335
	Female	4.5500	.74104
valuespost	Male	4.1481	1.22721
	Female	4.7278	1.02295

[a] n = 27 males
[b] n =30 females
[c] n =59 total

Descriptive statistics were conducted to assess the difference of means for males and for

females from the beginning of the intervention to the end for each subscale of the RASP. Table

10 indicates that the difference of means for creativity for males increased by .09 whereas females increased by .31, humour for males increased by .35 whereas females increased by.22, independence for males increased by .22 whereas females decreased by .01, initiative for males increased by .22 whereas females increased by .34, insight for males increased by .12 whereas females increased by .11, relationships for males decreased by .07 whereas females increased by .06, values orientation for males decreased by .21 whereas females increased by .18.

An analysis of variance test (MANOVA) of between-subjects effects was conducted to assess the interaction of gender on each of the subscales of the RASP.

Table 11: Gender and Independence

Source	Measure	F-Test	Significance
Gender	Independence	6.661	*0.014

[a]*$p<.05$

Table 11 shows the results of the MANOVA test which indicated a statistically significant main effect between males and females on the resiliency subscale of independence ($p=.01<p=.05$). In reviewing the descriptive statistics, males increased nominally with a difference of means of .22, while females decreased nominally with a difference of means of .01. Therefore it appears that the intervention resulted in an improvement in independence for males while females experienced a decrease in that area.

The Greenhouse–Geisser was also conducted to assess whether there were statistically significant differences in the RASP subscales between males and females. There were no statistically significant differences on any of the subscales. Therefore the intervention did not have a gender bias.

Attendance in Intervention and RASP Subscales

Table 12- Descriptive Statistics - Middle Third and Highest Third Attendance in Intervention and RASP Subscales

Measure	Split by thirds	Mean	Std. Deviation
creativtiypre	Middle third	4.0667	.80641
	Highest third	3.9298	1.03386
creativtiypost	Middle third	4.1333	.96367
	Highest third	4.0000	1.00000
Humourpre	Middle third	3.9833	.98809
	Highest third	4.2456	.86668
Humourpost	Middle third	4.3667	1.03110
	Highest third	4.4211	1.09906
independencepre	Middle third	4.2345	.81343
	Highest third	4.3997	.69082
Indepenpost	Middle third	4.4881	.72129
	Highest third	4.3534	.88110
Initiativepre	Middle third	3.7750	.93154
	Highest third	3.6798	.80855
initiativepost	Middle third	4.0125	.85253
	Highest third	4.3640	1.06799
Inisghtpre	Middle third	4.2114	.73486
	Highest third	4.2556	.86245

Inisghtpost	Middle third	4.3898	.88839
	Highest third	4.3784	.95089
relationshipspre	Middle third	4.5750	1.10617
	Highest third	4.2421	.85965
relationshipspost	Middle third	4.3750	1.00855
	Highest third	4.3614	.97950
Valuespre	Middle third	4.4292	1.08696
	Highest third	4.5000	.70218
Valuespost	Middle third	4.5500	1.17429
	Highest third	4.5132	1.01541

[a] *n=20 middle third*
[b] n=19 highest third

Table 12 provides the difference of means in the pre and post data for each subscale of the RASP for the middle and highest third attendees in the intervention. A review of the difference of means for the top two thirds who attended the intervention and all students provided the following information: for creativity the middle third increased by .06, the highest third increased by .07, whereas all study participants increased by .21. For humour, the middle third increased by .39, the highest third increased by .17, whereas all study participants increased by .30. For independence, the middle third increased by .26, the highest third decreased by .05, whereas all study participants increased by .09. For initiative, the middle third increased by .23, the highest third increased by .68, whereas all study participants increased by .29. For the subscale insight, the middle third increased by .18, the highest third increased by .12, whereas all study participants increased by .11. For relationships the middle third decreased by .20, the highest third increased by .12, whereas there was no change for all study participants. For

values orientation, the middle third increased by .12, the highest third increased by .01 whereas all study participants decreased by .01

According to the Greenhouse-Geisser test, there was no statistically significant difference between the middle and highest third attendees in the intervention and the RASP subscales. Therefore attendance in the intervention did not appear to affect the development of resiliency.

Qualitative Data Analysis

The transcribed interviews were analyzed to derive common themes.   Inductive and co-occurring coding was used to analyze the interviews. The analysis of the interviews provided triangulation of the RASP. Analyzing the students' and SSTs' perspectives on the intervention assisted the researcher in investigating if and how the intervention contributed to resiliency.

Data were collected through semi-structured individual audio interviews with student participants who had been selected by their peers as the best individuals to discuss their experiences regarding the intervention, and with the SST's (teacher participants). Questions were structured around the subscales of the RASP and participants were asked to share their overall experiences regarding the intervention.

Creativity

The subscale creativity is defined as the ability to generate alternatives, to cope with the challenges of life, and to imagine the consequences of one's actions in the decision-making process (Allen and Hurtes, 2001). All study participants (students and teachers) identified creativity as important when solving problems and meeting the challenges that were set out in the intervention. Student participant #1 stated that he would watch the person who showed them how to do an activity and then he would think about how he could do it better.

Participants described several activities where groups had to work together to complete a challenging task such as building a tower out of straws with limited resources within a time limit, fitting someone through a web of ropes without touching the web, or leading a horse through an obstacle course.   Student participants recounted how they came up with creative ideas to assist the group and themselves in successfully meeting the challenge. These challenges made the students "think outside the box" (teacher participant #3). Students would try several alternatives, fail and try again until the goal was achieved. Teacher participant #3 stated:

>One of the biggest skills we wanted them [students] to develop was coming up with a different plan….to seek out the opinion of someone else who might know, or have another idea, and try it and not be afraid of failure so much, but to always go back and revamp, and reassess and try again. Our big motto this year was down seven times, get up eight.

Student participant #6 stated that she found every activity in the intervention a challenge. "Ironically everything we went through I had a problem with, it [the intervention] kind of helped me to have ideas to deal with my problems."   Thus the intervention seemed to successfully assist students in generating alternatives in order to better cope with the challenges of life.

Imagining the consequences of one's actions in the decision – making process was an integral part of the academic sessions in the intervention. Academic sessions included topics such as backwards planning, chunking, time management, study skills, etc. The students did not particularly enjoy the academic sessions; they found the sessions "boring".   However, the academic sessions were presented as an integral part of the intervention, and students were expected to participate in the sessions, as well as the field trips. "Students learned that sometimes you have to do the boring stuff in order to enjoy the fun stuff later on" (teacher participant #3). The importance of reflecting on the choices one makes and the consequences of

those choices was reinforced when one of the police liaison officers was not able to attend the Youth Leadership Camps Canada (YLCC) camp. The officer met with the students to tell them himself he could not attend the camp due to an exam for which he had to prepare. He related his experience back to the choices students had to make, and explained that in order to be successful, sometimes students would have to do things that they do not enjoy in order to enjoy other things later on.

Teacher participants identified self-reflection as another resiliency skill fostered by the intervention that improved decision-making skills; an important part of imagining consequences of one's actions in the decision-making process. After each activity the group would reflect on what they learned and how they could apply that to their everyday lives. When students approached the SSTs individually to discuss personal issues, the SST would reinforce the problem-solving skills that students were learning in the intervention, thus improving the students' ability to self-reflect and imagine the consequences of their decisions. "…they [students] blaze through life, they don't even think about what they do and they just go from day to day, and they never take time to stop and reflect" (teacher participant #3). The ability to self-reflect is critical in order to plan. The ability to plan is critical to understanding cause and effect. When students are able to plan and understand cause and effect, they are better able to imagine the consequences of their choices. (Feuerstein, 1980, as cited in Payne, 2005). Thus they are better able to change their behaviour so that they are less likely to get into trouble at school and more likely to be academically successful by completing homework, studying for tests, and completing major assignments.

Humor

The subscale humour is defined as the ability to laugh at oneself and find joy in one's surroundings, thus enabling one to more easily bear the hardships of life (Allen and Hurtes, 2001). Student participants recounted how they used humour to overcome the obstacles they faced in the intervention. Student participant #1 stated that, "I would make people laugh to help [myself and] other students enjoy an activity that was very challenging." They learned how to laugh at themselves when facing their fears.

Teacher participants indicated that humour was instrumental in not only assisting students in meeting challenges in the intervention, but also in creating a safe atmosphere where students were comfortable taking risks and moving outside of their comfort zone. Teacher participant #2 recounted an event where a student used humour to overcome his fear of heights. The challenge was to climb up on a high rope and he was terrified of heights.

He would make fun of himself, and say, "I shouldn't be like this, I know, I know"…and laugh at his own fear…there were some inappropriate words coming out but he would be able to laugh at it and say, "I know I shouldn't say that, but"…he climbed something he never thought he would climb, and with the support of other people and his ability to take his fear, look at his fear, and laugh at himself as well, that got him through it.

Humour was instrumental in building community and in creating a sense of belonging for student participants. Teacher participant #3 stated:

Humour played a large part…they were able to laugh off their failed attempts, and they got support from the other students too…that safe environment where you could have humour, where you could take those risks and be creative and not worry about failure, really built up their self-esteem.

Police liaison officers also used humour in relating with the students. This was instrumental in developing a trusting, caring relationship with the students which fostered a safe atmosphere in the program. Thus the students were able to "take those risks and learn so much because they didn't feel like they were under the microscope all the time" (teacher participant #3).

Independence

Independence involves striking a balance between being true to oneself and accommodating the concerns of others as well as a positive, optimistic orientation toward the future and an ability to say no when appropriate (Allen and Hurtes, 2001). The intervention focused on group activities and provided opportunities for students to self-reflect and to make their own decisions. Student participant #2 stated that she learned that, "what people say about you doesn't really matter, being true to yourself, being your own person is what matters... the most important thing is to be yourself." Student participant #6 stated, "When you're doing a challenge, it kind of makes me want to push myself forward to do what I need to do, so I don't let anybody down, or myself." Making the commitment to attend each activity each time was an individual decision that each student study participant had to make and involved spending time away from their own group of friends to be with the intervention group; it was a demonstration of balancing being true to themselves and accommodating the concerns of the group. Teacher participants identified securing the support of some of the staff as a challenge they faced while implementing the intervention. Some teachers did not support the students missing class to participate in the activities of the intervention. The students often had to justify to those teachers why they needed to leave class in order to participate in the program, another example of how students' independence improved. An interesting observation made was that as students became more

confident and independent, some teachers complained that the students had become perhaps too confident in themselves and too independent (teacher participant #3).

Another element of independence is having a positive, optimistic orientation toward the future. Student participants stated that involvement in the intervention gave them hope and a positive outlook for the future. As student participant #3 stated, "…so this program extremely helped me out with like hope, that there's always hope to succeed and to get it done right and I dunno, just hope." Student participant #2 stated that after listening to Lesra Martin[1], a guest speaker, she is "now thinking twice about what my future is going to be like, what I'm going to do when I get older." Student participant #6 stated:

I went through a breakup and I thought it was the end of my life… we had some band come in and … this girl [was] talking about her relationship, and it was far more worse than mine. It made me realize that there's always something worse, and everything can be better, and she seemed to get over it, so obviously I could too… I have a hard time when I have a bad day, I tend to think negatively or do negative things just because I feel negative… DYP [intervention] taught me that on a bad day instead of just moping you should try to make yourself feel better about yourself, and there's always a bright side to everything.

The intervention seemed to enable students to feel hopeful about their lives and be more thoughtful about their future possibilities.

Standing up to peer pressure was a skill that student study participants identified as learning through the intervention. Student participant #2 stated, "This program improved my self-esteem" and meeting the challenges in the program "made me a stronger person, helped me be a

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[1] Lesra Martin, author of *The power of a promise: Life lessons encountered on my journey from illiteracy to lawyer* is a motivational speaker. He spoke to the students about the importance of discovering their possibilities and developing resiliency skills.

stronger person to help stick up for myself…my independence grew." Student participant #3 stated that he was better able to stand up to peer pressure because the intervention, "taught me how to think for myself." Student participant #4 stated, "Once you say no, you just leave it at that and walk away."

Initiative

Initiative involves the desire and determination to take charge of one's own life; to believe that one has the power to meet and overcome life's challenges (Allen and Hurtes, 2001). All student participants reported that the challenges they faced in the program, and in particular their camp experience was instrumental in improving their self-confidence which in turn influenced their belief that they have the power to meet and overcome life's challenges. Students reported how proud they were of themselves, and how positive they felt about themselves after achieving a goal. Student participant #6 stated, "It felt pretty great to meet challenges in the program because I don't really get to accomplish much so it was pretty cool." Student participant #3 stated that he, "felt like a hero" after facing his fear of heights, a challenge he met through the encouragement of others who cheered him on.

Students discovered that they were able to overcome a challenge that at first they thought was insurmountable. They learned that the only boundaries they have are the ones they set for themselves and through the help and support of instrumental people like their peers, their mentors, and their teacher, they can overcome anything. "This program gave me more courage…I know that I can accomplish any goal with encouragement from friends and teachers" (student participant #3). Student participant #1 stated:

My grades are lot better because last year, before I joined this program, my grades weren't very good…my teacher made me join the program and I started doing better…I felt more

confident to do things that I could never do before.

Participant #5 stated:

> We learned that you're gonna have a curveball that you get thrown into every day and that
> you're going to have to push through it even if you don't like it; you're going to have to build
> up and go through it.

At the beginning of the YLCC camp, one of the university leaders told the students that everyone was at different levels and asked the students to visualize what their limit was, and then to push themselves just a little bit beyond. Teacher participant #3 stated, "The camp was an opportunity to look at who they were and how they could maximize their strengths." She then recounted an event where a student who was terrified of heights and did not attempt the high ropes activities on the first day decided to try, after seeing how some of his peers went beyond their limits, a high ropes activity on the second day. He was able to go up half way to the cheers of his peers. He had been at a different camp prior to this intervention and had not tried any of the high ropes activities. "He was able to take the safe environment that was created, take all the support from the people in the program, and push himself past where he thought his limit was." The ropes activity provided the challenge for this student. The intervention provided the environment where he could develop the ability to take charge of his life and overcome his fear.

Teachers believe that without the program some of the students would have given up and perhaps stopped attending school at all. Teacher participant #2 provided the following example. A student whose marks in the first semester (first half of the intervention) indicated that he had given up, made significant improvements in second semester. During one of the rope activities in the intervention, he had overcome his fear of heights. At the debriefing after this activity, the teacher linked his experience of accomplishing something that he did not think he could

accomplish, to school. She told him that the same thing could happen in school. The student began trying harder in school and his marks at the end of the semester had greatly improved compared to the first semester, and he is looking forward to the next school year. Teachers also witnessed a change in how students dealt with adversity outside of the intervention when they approached the teacher to discuss individual issues. "Students are more confident in their abilities and the fact that they can be responsible for themselves and for their decisions and for the consequences that come, good and bad, from the things that they do" (teacher participant #3). Thus the effects of the intervention seem to be permeating other aspects of student study participants' lives.

All study participants identified initiative as demonstrating leadership. When asked whether they took initiative in the intervention, students described themselves as a leader who may try the activity first (leading by example), and in encouraging other students to try activities that they were hesitant about. Student participant #5 stated, "With a whole bunch of people if you take the role of being a leader, that's what helps you because you want to try to get your group to keep going." He also stated that, "I learned I can be a leader at times, pushing myself to do what you have to do… that you got to just keep pushing yourself ahead."

Students also described initiative as encouraging others to try the activities and not give up. Student participant #6 sometimes hesitated and sometimes took initiative. She stated:

We had to play these games…people [would] say oh this looks pretty stupid and you'd [I would] say well you know we have to do it so why not make the best of it… you show people it's actually fun then other people want to do it.

She gave a specific example where she took initiative and leadership with her group. She told her group, "you kind of have to do it because we're going to learn something out of this sooner or later, so I was the first person to get my group to do it."

Teacher participants also recounted how students demonstrated leadership in the intervention. They noted that some students took initiative right away while others took initiative after the first few meetings. "They [students] were called upon at different situations to step forward…to be someone who shows initative in different situations…there has been a growth factor there" (teacher participant #1).

Insight

Insight is defined as the ability to read and interpret situations, people, and subtle nuances of both verbal and nonverbal communication (Allen and Hurtes, 2001). Student participants demonstrated a lot of insight when answering the questions in the interview. They were able to identify where they were personally at the beginning of the program and where they were by the end of the program, and what events or components of the program were influential in helping them to improve their resiliency. They recounted situations where they were able to read and interpret situations, people, and use verbal and nonverbal communication to communicate their ideas, problem-solve, encourage their group, and take leadership. They discussed changes in their relationships with their peers, the university mentors, their police liaison officer mentor, and their SST. In discussing the changes in relationships, student participants identified developing communication, problem-solving, teamwork and conflict mediation skills through the activities in the intervention as being instrumental in forming positive, trusting bonds with others. As student participant #3 stated, "We learned how to work with people. We learned in a big group it's easier to work with more people than you'd think." Student participant #6 stated, "If people

join the program they would get teamwork out of it." Student participant #4 demonstrated insight when discussing how she was able to resolve conflicts within her group and help them to focus on problem-solving in order to successfully meet the challenge of the activity in which her group was involved. She also stated, "This program was about learning who you are and other people learning about you."

The intervention provided the students with the opportunity to relate to so many different groups of people that the students improved their level of understanding of both themselves and others. Student participant #5 stated, "I learned that I'm a very talkative person." Teacher participant #1 suggested that the multiple opportunities for students to interact with others enabled students to learn more social skills which in turn improved their relationships. He stated:

There were two or three girls who were very introverted when we started the program and a couple of them were extroverts...the extroverts became a little more empathetic to the other students...a little less self-centered, and the introverts definitely became more social with the others...there was more of awareness of how you talk to other people.

Teacher participant #3 indicated that she saw a change in how students approached struggles and difficult situations:

They [students] come from really tough life situations and I see a positive change in how they approach their life now and a lot of that is because we've had so much time to...connect as indivudals, as people in the DYP [intervention] program.

Student participant #2 stated:

I learned to let others go first before me, and that I'm not always the one who has to go first because one of the problems I've always had with myself is that I've had the problem that I

ask to be first a lot.

This insight enabled her to reduce the amount of conflict she often experienced with others, thus improving her relationships with other people.

The YLCC camp experience provided students with a unique opportunity to develop insight. Student participant #6 stated, "…being with someone for three days, and you have to work together and help each other out, you see their flaws after three days, you get to know who they are after a while." During the camp students had to create a fictitious country. They had to create customs, traditions, body language, laws, etc. and then they had to meet a group from another country and learn to understand each other. During the debriefing of the activity every student had an opportunity to speak. Several students shared personal stories about how they changed, about judging one another and about taking risks. "One student in particular shared his experience about being bullied and how he loved being a part of this program…about not judging people. His story really hit home with the students" (teacher participant #3). Teachers also witnessed insight from students during the Prevention of Alcohol and Risk-Related Trauma in Youth (PARTY) activity. "There were some real "ah-ha" moments...students started to look at their own lives and say, 'you know Miss, I do that, but that's probably not the best thing to do, is it?'...or 'I never thought of that Miss'" (teacher participant #2).

Other moments of insight were more informal and involved private conversations with the teacher. During these conversations, the teacher was able to tell that they had learned things about themselves and how they relate to others, and how they deal with conflict. "They realize that maybe some of the things that they've gotten themselves in [to was] because of their own actions…they stop blaming"(teacher participant #2). Teacher participant #2 recounted a specific

example of a conversation she had with a student who was having a difficult time with a teacher. She asked the student:

> …and if we were to have a race between you and the teacher for who's most difficult? And the student stated, "I know Miss, I'd be in the race, and I might win." And there's the humour part as well…that whole sense of "and I might win" and the ability to laugh at it. I asked her if I had talked to her earlier in the year, like last semester, what response I would have gotten. She said, "you would have gotten attitude" and I said, yeah and here we are laughing about it now…we've come a long way haven't we? And she said, "yeah."

Teacher #1 found that the student study participants demonstrated limited insight, while the senior high school students who participated as leaders, demonstrated much insight. These senior leaders, who had participated in the intervention in their junior years, were able to reflect on how they have developed over the last two years. They were also able to assist the younger student study participants in interpreting situations and relating to people.

Relationships

Peer, family and role model relationships that are honest, fulfilling and supportive define the subscale of relationships (Allen and Hurtes, 2001). This intervention program involved developing relationships with peers, university students, the SST and the police liaison officer. Student participants were asked to describe what their relationships were like with each group at the beginning of the program. Student participants indicated that they did not know a lot of their peers in the program, and in fact three were concerned that that they did not like some of the other students who would be participating in the program. The student participants did not know the university students; they were all strangers to them. The student participants knew the SST, and had had a positive relationship with that teacher in grade 9. The student participants did not

know the police liaison officer; in fact they indicated that they were suspicious, hesitant, and even intimidated by the police liaison officer when first meeting him or her.

Student participants were then asked if their relationship with the above groups changed during the program and if it did change, how it changed and whether it changed over time or due to one specific event/situation. All student participants indicated that their relationships with each group positively changed over time and that the three-day camp experience at YLCC solidified those relationships. In discussing how her relationships with her peers changed during the intervention, student participant #6 stated, "I started out with no friends and then when I joined the group, I actually got to be more involved with people… We're pretty close now… the one event that changed that relationship was the camping trip." By the end of the intervention, friendships with other students in the program had been formed. In fact, three student participants stated that they had become good friends with some of the other students that they did not know and did not particularly like at the beginning of the program.

Student participants stated that the level of trust in others: students, university students, SST, and police liaison officer developed and increased throughout the intervention. Student participant #6 described how she overcame her biggest challenge – opening up and trusting others:

> We had to trust a lot of people, like when we were with the horses, you had to trust that none of the kids were going to mess you up or anything or try to get the horse to kick you or something.… just opening up to people…talking to people, trying to put your opinion in… was pretty hard. But you kind of have to do it when you have those challenges.

She met this challenge through the encouragement of other people. "It took some people to encourage me to open up… be less stiff… and actually talk and put my opinion in… it made me

feel more comfortable that people wanted my opinions." Student participants learned that as long as they have friends and family that will help and support them they can succeed in doing whatever they want to do. Student participant #3 stated with that support he, "can succeed in my goals and everything" thus demonstrating the importance that relationships play in developing resiliency.

Teacher participants indicated that students' relationships with other students grew and developed throughout the intervention. Since the students spent so much time together students really got to know each other as individuals; they became almost like a family. The students developed a real camaraderie. They looked out for one another. Teacher participant #3 gave an example of how the students would let each other know that they needed to see her to get a consent form for the next activity in the intervention. She did not ask them to let the other students know; they took this initiative on their own. "They took ownership that they were a team and a family…they wanted to make sure that everybody was involved…they had never really fit into any kind of group before, so they really took pride in this group." The teacher found that once the students' confidence in themselves began to grow, their ability to relate to other people also improved. "I saw the effects within the group, but I'm certain it has rippled out and into their relationships with all the other students in the high school…it's just a catalyst for better relationships overall in their lives and at school." Thus once again it appears that the lessons learned in the intervention are being applied in other aspects of students' lives.

The mentoring relationship between the university students (mentors) and high school students (student study participants) was identified as a positive, important relationship by the students. Student participant #2 stated, "University students made me feel welcome even though they never met me before the first day." The more that students interacted with the mentors, and

the more they got to know them, the more trust was built. Student participant #6 stated, "It was really nice to have older people working with us." Many of the student participants did not have positive role models in their lives. The students looked up to the mentors and the mentors became an integral part of the program.

Teacher participants also noted that the mentoring relationship between the university student mentors and the student participants developed into a positive, trusting relationship. Teacher participant #1 recounted the response from the student participants at the final activity with the mentors, "I could see how much the mentors meant to the students…from not knowing these people at all in September and October, to developing a bond with them…students were obviously sad to see them not be a part of things anymore."

There were two groups of university mentors at each study site: students involved in the Leadership Experience for Academic Directions program (LEAD mentors) at the Faculty of Education and students involved in the Faculty of Human Kinetics (Kinesiology mentors). Each group brought a different perspective to the intervention; thus each group provided a different dynamic to the intervention. The LEAD mentors took more of a "teacher role" in the intervention and constantly connected concepts to the activities while the Kinesiology mentors loved the physical element of the intervention and focused more on humour, taking healthy risks in a safe environment and never giving up. The teachers found that both groups provided a good balance to the program and that the student participants responded well to both. The mentors were close enough in age that the students felt safer talking to the mentors than talking with the teacher. The mentors were well prepared for that responsibility. Teachers found that when the mentors opened up about their own life experiences, about how they tried and failed, what they

learned, and how they tried again, that the relationship with the students deepened and the level

of trust was enhanced.

The strength of the mentoring depended on the strengths and commitment from the mentors.

Teacher participant #2 found that good role modeling and a strong connection with the students

occurred with some of the mentors. However, when other mentors did not fully commit to the

intervention and missed activities, this was detrimental to the mentoring relationship as student

participants lost trust in that individual.

Teacher participant #3 stated that she had stellar mentors this year. At the beginning of the

program she found that the mentors had a difficult time "finding their niche," which she

described as finding the balance between being a leader with some authority and being a friend.

At the beginning of the intervention the mentors set a positive tone and created a safe atmosphere

by modeling the expectations of the intervention. They used humour to get the students to

loosen up, took risks themselves, and encouraged and supported each other even though the

LEAD and Kinesiology students did not know each other very well.   They created an

environment where "we could be goofy, you could take a risk and we would support you on that.

We wouldn't ostracize you or break you down, but build you up because you took those risks"

(teacher participant #3).

Teacher participant #3 gave the mentors responsibility for the academic sessions. She

provided the topic and divided the students into small groups with each mentor. The mentors

were responsible for designing and delivering the activity. They were able to use an approach

that they were comfortable with, and they provided examples of how they used that specific skill

from their own experiences. This authentic approach was effective because the students knew

that their mentors were not just providing an assigned activity; the mentors truly cared about

them and wanted them to be successful. "The students are more likely to integrate these new skills into their own lives because it came from this friendly perspective" (teacher participant #3).

All student participants reported that their level of trust in the police liaison officer had greatly improved by the end of the program. They made sure to approach the officer, and speak to him or her, just to say hello or to have a deeper conversation, whether the officer was in the school or in the community. Student participants reported that the personal connection that they made with the officer lasted beyond the final activity of the program.

Teacher participants also witnessed the change in the relationship between the students and the police liaison officer. Teacher participant #3 noted that at the beginning of the intervention when the police officer was first introduced, she noticed apprehensive looks from the students. Many had had negative interactions with the police in the past, or their family had negative interactions with the police. It was important that the officer arrived out of uniform for the first few activities so that students would see him as a person first and as a police officer second. He used humour to break down the barriers put up by the students, and fully participated in all the activities of the intervention.

The ropes activity was identified as a turning point in the relationship between the students and the officer. "The officer fully participated in the ropes activities, laughing with the students and they almost forgot he was an officer" (teacher participant #3). The teacher noted that once he was accepted into the group he used that to his advantage. He would give the students his perspective on things. One example occurred during an academic activity. The topic was exam preparation. He spoke about the choices that he had made in his life that he wished he had not. He talked about liking video games and the students related well to that. Then he talked about

how people get addicted to that and the concept of prioritizing. It is okay to like video games but since exams are coming up students have to prioritize. He was very good at remembering details about the students and he would bring these details up when he talked with them. This was instrumental in creating a personal connection with the students and they looked forward to his visits to the school and his involvement in the program. He told them that if they got into trouble he would be extra hard on them because he cared about them and he knows how complicated their lives could get if they get into legal difficulties. By the end of the program the students really valued him and saw him first as a person and then as an officer. Teacher participant #3 stated:

> We were creating this atmosphere of people caring about them [students], and wanting them
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> to do the best they can, not just because they need to conform and get good marks, but why
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> we wanted them to do that, why their choices are going to impact their future and I think it
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> came from different angles and I think that was a positive experience to have the police
>
> involved.

When the liaison officer was not able to attend the camp because he had to study for an exam, the students were devastated. He wanted to tell the students himself that he could not make the camp and he used this opportunity to reinforce his previous discussion about prioritizing and sometimes having to make difficult decisions that in the long term will provide a better outcome.

Teacher participants found that students developed a better understanding of the police liaison officers' role in the school. Teacher participant #1 described this new understanding:

> They [the students] see that they [police officers] are there for a variety of reasons and not just
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> to put the cuffs on somebody…the students see the role of service to the community [that the
>
> officer has]… they see the officer as an extension of the school network.

The relationship with the students significantly changed when the officers joined the students in the three-day camp experience. "They [the students] realized that they weren't there to be policed; they [the officers] were there to join in the activities with us and join in the fun." Teacher participant #2 also identified the camp experience as a turning point in the relationship between the students and the police officer. The officer became involved in everything with the group. He became the group photographer and did every activity with the students. At lunch the students invited the officer to have lunch with them at their table. At that point any barriers that existed between the students and the officer disappeared. Teacher participant #2 stated:

The relationship was really, really positive. I don't think the students really had any real relationship with police officers…and here's this guy who was a lot like a grandfather to them and that's kind of what the relationship has become.

The relationship the student participants had with the SST was already very positive and developed, which in part was the reason students agreed to participate in the program. They trusted that the SST would be inviting them into something that would be very positive for them. Throughout the program the relationship with the SST deepened. Students saw their SST in multiple dimensions, rather than simply being the SST. For example student participant #3 stated, "I finally saw the fun side of my teacher." All student participants reported that a deeper level of trust developed between the SST and the students. Student participant #6 stated, "I was very close to my student success teacher before the program but now I appreciate everything she did for me." Student participant #1 stated, "It must have taken them a lot of time to come up with the program, so they must be like really good people to care about people." Students were more comfortable with the SST and therefore more willing to let the teacher know anything that was happening with school or any other aspect of their life.

Teacher participant #2 found that the interactions she had with the students in the program allowed her to see a different side of the students and they were able to see a different side of her, which allowed her to have good conversations with students that she may otherwise not have had, "…we don't have to stay at the surface level, we can go a little deeper and there's a trust there that's improved over the year [the intervention]." She discovered that inviting the students to join the program improved her relationship with the students. At the end of the program when she asked those students who said yes at the beginning of the intervention and then sporadically attended to complete the second RASP survey, they all agreed to do that. They could have declined. They appreciated that the teacher was willing to provide them with a positive experience at school and just that gesture deepened the trust and gratitude they had for the teacher. She will now sit with each of these students to ask why they did not consistently attend the intervention to find out what barriers need to be removed for the future.

Teacher study participant #3 reiterated how the relationship between her students and herself deepened:

DYP wasn't just about the activities, wasn't just about the academic stuff, it was about this day to day stuff where they needed someone to connect with, to report to, to vent to, to brag about their accomplishments because a lot of them don't have that in their lives.

She found that the connections she had with the students intensified during the intervention due to the amount of time she spent with the students, along with the opportunities the activities in the intervention provided her to talk to her students about how to meet and face adversity in their lives. She let the students know that she does not have all the answers, but that she cares and could guide them to solve their own problems. Her open and honest communication and consistent contact with the students was instrumental in changing her relationship with the

students from being the teacher who monitors their academics and sporadically checks in with them to the teacher who was truly concerned about all aspects of their lives, and who was a consistent stable foundation for the students at school. This was important to the students as, "their personal lives, family lives, and education could change on a dime." She became the students' "hub" at the school. She explained:

> …because they're in DYP, they were able to see me as a safe place…they know I don't have all the answers because I'm always very honest about that, but I can usually figure out where to go for the answers so they trust that and they'll seek me out to ask me a question if they're having a problem… or just check in to tell me a happy story that happened…they did really good on a test and they want to brag about it. They're so happy to see me excited and I really am excited because I've seen so much growth and I'm very proud of each of them for different reasons… I tell them I'm going to be your best friend and you're worst enemy. I want to celebrate with them but I'm also going to be the first one to keep reminding them of their commitments, their obligations in terms of their classes and relationships with other students…to learn the lessons that we've learned and now apply them into their lives…they don't necessarily know where to turn to sometimes when life throws them an obstacle and that's what we talked about in DYP too…you need to take that risk and talk to someone who cares about you…many don't have that kind of adult relationship in their lives.

Like teacher participant #3, teacher participant #2 found that she became a constant foundation for the students at school. Students realized that she was someone who would always be there to support them throughout their high school career, yet they did not become dependent on her. She explained:

> They [students] need to know that I'm going to be there, but…they don't need to be right

against me…There's good healthy boundaries….they don't need to cling to me because there's enough resilience there and in their group of friends they made along the way, that that will get them through.

Teacher participant #1 described a similar experience with his students:

I get to be the teacher who's supporting them and most of their relationships with teachers are probably not even near as positive…I get to see them in a different light so I can actually be an advocate for them…I think they realize that because they'll ask for help for various things.

Values Orientation

Values orientation includes a basic knowledge of right and wrong, the desire to live a good and productive life, to serve others in need, and to make one's own decisions rather than accepting someone else's rules. It also involves being able to identify what is appropriate, and the courage to stand by one's convictions (Allen and Hurtes, 2001). This description is similar to the one for independence. As previously discussed under independence, student participants identified an increased ability to make one's own decisions rather than accepting someone else's rules or influence, and an ability to be true to themselves. Student participant #3 stated, "When you hang out with nice people…they help you be a better person. I learned I can really trust more because before I was in this program I didn't. I was getting into fights, I didn't really trust anybody." Student participant #6 stated:

I've learned that I can do or accomplish things that I want to if I try, because I don't tend to try, so I guess this group showed me if I push myself in a positive way to do my work or help someone out, or just be good… this program taught me how to deal with my problems over time. It slowly did this by each event… Slowly everything I did, the program [intervention] changed.

Throughout the intervention participants had several opportunities to help each other meet the challenges provided by the intervention. All student participants provided several examples of how they encouraged their peers to meet the challenges they faced and not give up. Students also had opportunities to participate in community service activities. Student participant #2 stated at the end of the intervention, "I'm really thinking about volunteering at different places now that I know about them. I'm now thinking about getting some volunteer hours." All teacher participants witnessed a change in the values orientation of students when they were involved in the community service activity. Teacher participant #1 stated:

The can food drive (community service activity) was not something that these students would have normally done… they did this on their own time in the evening, when they weren't getting out of class to do it…it was a big risk, to knock on somebody's door and ask for a can of food….

Teachers witnessed evidence of values orientation in students throughout the intervention. Teacher participant #3 witnessed students who related to others who may suffer similarly to them. They responded with compassion. She recounted an incident where a student reached out to another student who he did not know. This was the same student who, at the camp, talked about how he had been bullied in the past and how important it was not to judge others. Rather than turning to hate and bitterness because of his past experiences of being bullied and ostracized, he extended kindness and acceptance to someone else. On the way back from the camp, all three schools stopped at the same restaurant. This student paid for his food and on his way to the table with his friends he paused by a table with a student from another school who was sitting by himself. He invited him to join him and his friends. When the other student declined, this student insisted. The other student picked up his food and joined the other table.

The teacher stated, "You could see the joy on his [the other student's] face. This was my proudest moment of the students…he [her student] actually put into practice what he talked about at the camp."

Teacher participants witnessed a change in values orientation during the PARTY program. One student commented on how important people's decisions are, not just for themselves personally, but for the greater community. Teacher participant #3 stated:

He (the student) realized he has control over himself in terms of the decisions he makes, but he could still be affected by other people's bad choices as an innocent bystander. We had a really good dialogue about what we choose to do and how we act doesn't just affect us, it affects other people, those we love and even sometimes strangers…how your consequences [decisions you make] ripple out into the community, and into the world.

Other Resiliency Skills Developed From the Intervention

Self-Esteem

As has been mentioned previously by both students and teachers, the intervention improved students' self-esteem. As students successfully met the challenges that were inherent in the intervention activities, their self-confidence improved. As students began to successfully apply the lessons they were learning in the intervention to other aspects of their lives, not only did their self-confidence improve, so did their self-esteem. When asked what they learned in the program, student participant #6 stated, "I learned that I am a very valuable person." Student participant #4 stated, "I learned I'm a good person." Teacher participant #3 described how one student who had a lot of self-esteem issues at the beginning of the program, who was very quiet and reserved at the beginning of the intervention, emerged as one of the main leaders of the group.

Students' self-esteem improved by simply being invited to participate in the intervention. The invitation to participate in the program came from a strengths perspective. Students were invited to participate in the intervention because the teacher recognized leadership qualities in them. At first the students were shocked that anyone saw that positive trait in them. The teachers did see the ability for them to become first leaders in their own lives, going beyond their own boundaries and then becoming leaders in the greater community. The fact that someone saw something positive about them improved the students' self-esteem. When students were asked to take a leadership role in the activities, for example thank a speaker, students would say, " 'Miss, I'm quite honoured to do this'…they felt chosen and they felt special. There's a confidence there that wasn't there before…and a pride in themselves" (teacher participant #2).

Teachers noticed that this improved self-esteem seemed to affect students' relationships with other people: their friends (outside of the intervention), people they did not know who facilitated activities, and other teachers in the school. Teacher participant #1 provided the following example. A student who has no father and tragically lost her mother was very timid and hesitant at the beginning of the intervention. Her guardian was not optimistic that she would agree to participate and if she did agree whether she would fully commit to the intervention. She did both. Her student success teacher noted that she was able to come out of her shell, and open up to other people. She is still very quiet and perhaps guarded but not to the extent she was at the beginning of the intervention.

Teachers also noticed a change in students' attitudes. Towards the end of the intervention, teachers asked their students to dress up for an activity that included guest speakers and a celebration of the intervention. Their decorum throughout the event was exemplary. Teacher participant #1 stated, "I don't think we would have gotten that in October." The behaviour of the

students indicated that they were aware that this special day was for them and they were very appreciative of both that event and of the overall intervention.

Sense of Belonging

Throughout the intervention students were provided with adult mentors who, "cared about them for who they were, not what they could do or how they could perform, or if they could abide by the rules but on a very personal level wanted to help and wanted to be there for them, and give them these opportunities because they believed in them" (teacher participant #3). This dynamic not only affected students' self-esteem, it also provided a sense of belonging. The acceptance student participants experienced from all members of their group, the safe environment that was created where students could take positive risks, and be supported whether they failed or succeeded, as well as encouraged when they failed to try again, instilled a strong sense of belonging to the group, and to the school community. Teacher participant #1 stated: "Students started to show concern for other students…they felt like they belonged to something as a group so they had a sense of belonging." Students' strong sense of belonging was demonstrated through their commitment to attend activities, especially those that were on their own time. One example was students had to give up two lunches to watch a movie in order to prepare for a presentation by a guest speaker. The teachers were not sure how well attended these sessions would be and were pleasantly surprised and observed that the students were very proud of themselves for attending these meetings on their own time.

Teacher participant #2 noticed that being a member of the DYP group had meaning for the students around the school. They began to feel that they were part of something. At the final school assembly the students in the intervention were called up to be recognized in front of the entire school community. A presentation ensued with a video highlighting program activities.

The teacher is convinced that if he had called the students to come forward and stand in front of the school community in the fall, they would not have done so:

> I am seeing an increase in sense of self-worth, and that's where I think you have to start because everything comes from there. If you feel better about yourself, then you're going to feel better about other people, your relationship with other people and your belonging in the community…but you have to start feeling better about yourself first…students actually did start feeling better about themselves in terms of their own status in the school.

The applause they received from the school community, from their peers, was another event that improved their feeling of belonging and self-worth. "From start to finish…70-80% of them…increased their self confidence…increased their positive mindset towards school. The majority of them have a better feeling about coming to school and their place in school."

Student participants also talked about experiencing a sense of belonging and strong engagement in the intervention. When asked how the program could be improved, student participants stated that more people need to join the program and when they do to commit to it. They also want to see the program continue. Student participant #2 stated, "I can't wait 'til next year to see the leaders again, I want to go back to the YLCC camp. I want to do everything all over again." Student participant #6 stated, "It's a very good program, it helped me out through so many things so I think it should continue on." Teacher participant #3 stated, "This is their real classroom. Students can regurgitate information but this is life changing, this is stuff that's going to educate them for the rest of their lives. It certainly has value." Teacher participant #2 concluded:

> It has been an interesting year in terms of the program…we're still learning and growing with it and realizing there's so many components….It's a valuable program in terms of the support

it can offer them [students]…there's a lot of possibilities for it to grow and to become even

more than it is. I look forward to next year with it.

All teacher participants identified the need for sustained funding as necessary to improve the

program so that each year they are confident that they can begin planning and continue to offer

this intervention to more students.

CHAPTER V

DISCUSSION, LIMITATIONS AND RECOMMENDATIONS

First Null Hypothesis – There Is No Relationship Between Academic Success as Indicated by Student Engagement and the Intervention.

Academic Success

The first null hypothesis that there is no relationship between the intervention and academic success as identified by student engagement: increase in attendance, decrease in the number of times late for class, increase in GPA and improved credit accumulation was not verified by either the quantitative or qualitative data. Results from the Pearson-Moment Correlations test demonstrated that as attendance in the intervention increased, the number of times a student was absent from school, and the number of times students were late for class decreased while credit accumulation and GPA increased. These results indicated that attendance in the intervention positively affected the academic success of students.

First Research Question - Does the *Discovering Your Possibilities* (DYP) Program Increase Academic Success, as Identified by Student Engagement: Increase in Attendance, Decrease in Lates, Improved Credit Accumulation and Increase in Grade Point Average (GPA) and Increase the Level of Resiliency of At-Risk Youth?

When reviewing descriptive statistics and the Greenhouse Geisser MANOVA test for differences between pre and post academic data, it appears that students did not improve in the academic measures of attendance, the number of times late and credit accumulation. Descriptive statistics indicated that attendance, and the number of times late for class increased, and the MANOVA test indicated that these increases were statistically significant. Descriptive statistics indicated that credit accumulation decreased and the MANOVA test indicated that the decrease was statistically significant. It is important to note that pre data came from the first year of high school and post data came from the second year of high school. While the

variables measured the same behaviours, there is a significant difference between the grade 9 and grade 10 year. This difference has been verified by the qualitative data in this study as well as documented research. Teacher participant #3 commented:

Grade 10's have a lot of drama, friendship drama and even within the group there was a lot of drama that kept coming up: boyfriend issues, life issues, little fights and little squabbles…and when they talked to me about their issues, I would keep bringing back that idea that you need to move on now, you've dealt with it,…because these are the kids that it [the drama] would affect their whole lives.

Friesen et al.'s (2009) report *What Did You Do in School Today? Transforming Classrooms Through Social, Academic and Intellectual Engagement* provides further evidence that the Grade 10 year is a particularly difficult year for students. This study verified that 15 year old students, generally grade 10, tend to have lower attendance and academic engagement resulting in a decrease in academic performance. These researchers found that students had lower levels of attendance (a measure of social engagement in school) as grade level increases and that students in the grade 10 year had lower levels of attendance than previously reported in an Organization for Economic Cooperation and Development study. The researchers also discovered that the decrease in attendance paralleled the decrease in intellectual engagement. The Program for International Student Assessment (PISA) indicated that about 29% of Canadian 15-year-old students performed at Level 2 or lower in reading and mathematics (Bussiere, Knighton, and Pennock, 2007, as cited in Friesen, et al., 2009). Provincial and board credit accumulation data for the last three years indicated that attaining credits in grade 10 is challenging for all students (at-risk and not at-risk). Unfortunately provincial and board data for attendance, number of

times late for class and GPA were not available, thus comparisons for these measures were not possible.

According to descriptive statistics GPA decreased, but the MANOVA test indicated that the decrease was not statistically significant. Descriptive statistics indicated that credit accumulation decreased and the MANOVA test indicated that the decrease was statistically significant. These results suggest that students' academic performance in the credits that they attained improved in grade 10 compared to grade 9 since there was no statistically significant difference in GPA but there was with the decrease in credit accumulation.

More significant academic improvement occurred for those students who attended at least two thirds of the intervention activities. Descriptive statistics, when eliminating those students who had the lowest third attendance in the intervention, verified that the more students participated in the program, the more improvement occurred in the academic measures. The MANOVA test verified that these changes were statistically significant except for GPA. It is interesting to note that the middle third attendees seemed to demonstrate the greatest improvement in all academic success measures except for credit accumulation, where the highest third attendees in the intervention outperformed the middle third attendees.

Qualitative data results also indicated that students who were more fully engaged in the intervention improved their academic success. Teachers observed improvement in students' academics and attendance in school. Students reported that their marks and the amount of effort they put into their classes had improved in grade 10 compared to grade 9.

While some of the quantitative data results, specifically descriptive statistics and MANOVA tests, indicated that the intervention did not increase the students' academic success as identified by student engagement: increase in attendance, decrease in the number of times late for class,

and increase in credit accumulation and GPA, the Pearson Product-Moment Correlations test and qualitative data results indicated that the intervention was successful in positively affecting academic success for those students who were more fully engaged in the intervention. Further, these results suggest that being in class is not better than being in the program. The SSTs can provide this information to other staff who were supportive of the program and to respond to challenges by those who were not supportive of students missing classes in order to participate in the intervention.

Second Null Hypothesis - There Is No Relationship Between Resiliency and the Intervention

Quantitative data analysis seemed to verify the null hypothesis that there is relationship between resiliency and the intervention. However qualitative data analysis seemed to indicate that the null hypothesis is not verified. Teacher participant #1 observed that:

…life has already dealt a lot of the students not a very good poker hand…. students are still functioning, perhaps not efficiently academically, but the fact that they're coming to school and we were able to keep them the full year in this program is a testament to the resiliency [developed] in the program.

Descriptive statistics and the Greenhouse Geisser MANOVA test indicated that students' level of resiliency, as assessed on the RASP, did not improve from the beginning of the intervention to the end except in the initiative subscale. The overall goal of the intervention was to increase resiliency in at-risk youth. The ability to successfully adapt and overcome challenges under adverse conditions was the definition of resiliency that was used in this study. The definition of initiative most closely reflects this definition of resiliency. Initiative involves the desire and determination to take charge of one's own life; to believe that one has the power to meet and

overcome life's challenges (Allen and Hurtes, 2001). Interviews with all study participants recounted again and again how students demonstrated initiative, even when providing examples of resiliency for the other RASP subscales.

Qualitative data analysis indicated that students improved their resiliency, not just with initiative, but in all the subscales of the RASP. I wonder if the disconnect between the quantitative results from the RASP and the results from the qualitative data indicate that the RASP was not the best instrument to evaluate the intervention's impact on resiliency. The RASP was chosen as the survey instrument as, at the time, it was the only instrument found that assessed resiliency skills.

In reviewing the questions on the RASP, many of the questions did not directly relate to the activities and lessons involved in the intervention. For example, questions regarding lying, changing one's surroundings, noticing small changes in facial expressions, letting out one's emotions, supportive family, sensing when someone is lying, controlling one's own life (rather than controlling the decisions one makes in one's life) were not directly addressed in the intervention. In fact, the intervention actively worked against the RASP's interpretation of some of the resilient characteristics of independence. For example, at-risk students tend to be very comfortable with seeing things differently than others, to the point that they struggle to understand another's point of view. Yet the RASP evaluated students' ability to be comfortable with not seeing things as others do as a positive resilient skill (Allen and Hurtes, 2001). The same occurred with the independent statement that it is okay if others do not like the person (2001). At-risk youth tend to have negative experiences with other people, especially those in authority. The intervention sought to provide these youth with the experience that it is positive for others, especially those in authority, to like them. The intervention actively sought to help

students to develop the skills needed to positively relate to others in order to improve their relationships.

All teacher participants commented on the role the senior high school leaders played in the intervention. The senior high school students had participated in the intervention previously and were asked to return to the intervention as a leader. Student participants knew that they would also have an opportunity to return to the program in the following year as a leader, if they demonstrated that they would be ready and able to step up to leadership the following year. It is interesting that during the interviews student participants all stated that they wanted to return as a leader the following year so that they could help in providing this intervention to other students, and they all recommended that the intervention continue so that other students would benefit from it. At one school, students took initiative to make sure all members of the group knew when the next activity would take place, and they reminded each other each time they saw each other to hand in the consent form to the SST so no one would miss out participating in the next activity. Yet values orientation (serving others in need), according to quantitative results, did not improve by the end of the intervention. Perhaps a survey instrument was needed that would more directly relate to the specific goals and lessons of the activities that were provided in the intervention.

Parts of the definition of values orientation seems to be very similar to parts of the definition of independence. Values orientation includes the ability to make one's own decisions rather than accepting someone else's rules, and involves being able to identify what is appropriate, and the courage to stand by one's convictions. These components of values orientation seem to mirror the following components of independence; striking a balance between being true to oneself and accommodating the concerns of others and the ability to say no when appropriate (Allen and

Hurtes, 2001). If these components of values orientation were considered to be part of independence, or vice versa, I wonder if there would have been a statistically significant change in values orientation or independence.

At the end of the intervention, students were at the awareness stage of some of the skills that were taught in the intervention. One example is the realization of the consequences of crossing "the stupid line" that students learned during the PARTY program, especially in either choosing to drink and drive (these students do not yet have a driver's license), or in accepting a ride from someone who has been drinking and driving. Perhaps students have not yet had an opportunity to act on some of the skills that they were just developing and thus in answering the questions on the post RASP, they had not yet had an opportunity to practice these new skills.

I wonder how well students understood what the questions were asking. When interviewing student participants, I was asked by all of the student participants to define the word initiative. I wonder if the RASP would be more suited to older adolescents whose cognitive processing abilities are more developed. When asked if students demonstrated insight, one teacher participant noted that senior high school leaders demonstrated extensive insight while the student participants demonstrated limited insight. These senior leaders were more able to reflect on both their own behaviour and as well as the behaviour of others. Perhaps these older students would have been better able to reflect on the statements on the RASP and ponder if and how they were able to demonstrate those behaviours.

One teacher participant noticed that students were much more critical when answering the questions on the RASP during the post test than during the pre test. Teacher participants noted that students agreed to participate in the intervention without really understanding what the

intervention was about. Perhaps students' understanding of resiliency changed from the beginning to the end of the intervention, thus affecting how they answered the post test survey.

The authors of the RASP identified concerns with the internal consistency alpha values for each of the seven subscales of the instrument and suggest that these lower values may be due to the fact that each of the seven subscales is multidimensional in and of itself (Allen and Hurtes, 2001). They recommended the use of focus groups or interviews to identify respondents' conceptualizations of the seven subscales of resiliency. The interviews that were conducted in this study verified the need for triangulation of the RASP instrument in order to identify the participants' interpretations of the development of resiliency through the intervention. Qualitative data analysis demonstrated that the overall goal of the intervention, to increase resiliency in at-risk youth, was met and that gains in each subscale occurred.

Qualitative data also demonstrated that other resiliency skills were developed through the intervention that were not assessed on the RASP. Student and teacher participants identified the resiliency skills of self-confidence, self-esteem, self-reflection and sense of belonging as improving through the intervention. Each time students successfully met a challenge, their self-confidence improved. Through the support and encouragement of others, students' self-esteem, and their sense of belonging to the group, and eventually to the larger school community, also improved. Debriefing sessions of the activities provided opportunities for students to self-reflect. The continuous opportunities to successfully meet challenges and apply new skills of resiliency to master the next challenge continually deepened students' self-confidence, self-esteem, self-reflection, and sense of belonging. Thus quantitative data results that indicate no change occurred in students' level of resiliency are suspect.

Gender Differences

There was no statistically significant difference between gender and pre and post results for academic success. There was also no statistically significant difference between gender and pre and post resiliency results. Therefore the intervention did not have a gender bias.

It is interesting that the MANOVA test for between subjects indicated that there was a significant effect between gender in the subscale independence. In analyzing the difference of means from descriptive statistics for independence and gender, males appeared to increase in their level of independence while females appeared to decrease. The authors of the RASP identified a negative covariance between independence and relationships. Therefore it appears that an increase in the independence subscale would result in a decrease in the relationships subscale and vice versa (Allen and Hurtes, 2001). In analyzing the difference of means from descriptive statistics for relationships and gender, males appeared to have decreased while females increased. The negative covariance between independence and relationships was also evident when analyzing the impact attendance in the intervention had upon RASP results.

When analyzing the academic data in grade 9 and in grade 10 for gender, it is interesting that females in grade 9 attended school less but had higher credit accumulation and a higher GPA. Perhaps this demonstrates that females were more independent at the beginning of the intervention, and learned to develop relationships, while perhaps males were more dependent on others and learned to become more independent.

Second Research Question - What Elements in the Program Contributed to Resiliency (if any) from the Perceptions of the Students and from the Perceptions of the Student Success Teachers (SSTs)?

Brooks (2006, as cited in Russell-Mayhew & Short, 2009) proposed that since risk affects adolescents at multiple levels, efforts to enhance resilience must also take place at multiple levels.

Study participants identified multiple components of the intervention as significant in developing resiliency. While it is difficult to separate these components as they are all interconnected, two key components that were consistently identified by study participants as being instrumental in developing resiliency were the activities themselves and relationships. The activities provided the opportunity to successfully meet a challenge again and again throughout the intervention, thus providing the setting for students to continuously practice and develop skills of resiliency. Relationships provided the safe environment students needed in order to take risks and learn resiliency skills. Table 13 outlines how the activities in the program and relationships provided opportunities for the development of the following resiliency skills: creativity, humour, independence, initiative, insight, values orientation, self-confidence, self-esteem, self-reflection, and a sense of belonging.

Table 13 - Activities and Relationships

Activities	Relationships
Creativity • Activities were set up where students needed to use creativity to solve challenges • Academic sessions provided opportunities for students to imagine the consequences of their actions	**Creativity** • Encouraging students to continue to try different alternatives until a successful solution was found • Theme of "down seven times, get up eight" • Individual meetings with students to discuss personal issues provided opportunities for students to imagine the consequences of their actions
Humour • Challenges set up in the activity provided opportunities to use humour to successfully meet the challenge	**Humour** • Role-modeling by adult members
Independence • Balance between being true to oneself and accommodating the concerns of others - participating in activities was voluntary – thus each time students had to choose to participate with the group or stay at school with their own friends • Positive, optimistic orientation toward future - hope - messages from guest speakers • Ability to say no when appropriate - meeting	**Independence** • Balance between being true to oneself and accommodating the concerns of others - not wanting to let others or self down and the commitment to the group to attend each activity • Positive, optimistic orientation toward future - hope –students learned that with the support of others they can achieve any goal • Ability to say no when appropriate -personal assistance with problem-solving from adult

the challenges in the activities improved self-esteem and self-confidence to stand up to peer pressure	mentors taught students to think for themselves
Initiative • Desire and determination to take charge of one's own life - guest speakers and successfully meeting challenges inherent in activities • Believe that one has the power to meet and overcome life's challenges - every activity provided students with the opportunity to meet and overcome a challenge thus reinforcing the belief that they had the power to meet and overcome life's challenges • YLCC Camp was the most influential of the activities in this area	**Initiative** • Desire and determination to take charge of one's own life- sharing of life experiences by mentors in debriefing sessions and individual meetings/conversations with students • Believe that one has the power to meet and overcome life's challenges - individual meetings/conversations between adult mentors and students • Supporting and encouraging each other
Insight • Ability to read and interpret situations, people and subtle nuances of verbal and nonverbal communication - activities provided the problem/obstacle that students needed to deal with as a group so that insight was required in order to solve that problem/ meet that challenge	**Insight** • Ability to read and interpret situations, people and subtle nuances of verbal and nonverbal communication – providing a large number of different groups of people to relate to in every intervention activity
Values Orientation • Includes a basic knowledge of right and wrong and the desire to live a good and productive life - PARTY program, guest speakers • To serve others in need - community service activities • To make one's own decisions rather than accepting someone else's rules and identify what is appropriate and the courage to stand by one's convictions - PARTY program and guest speakers	**Values Orientation** • Includes a basic knowledge of right and wrong, and the desire to live a good and productive life - debriefing conversations after PARTY program and presentations by guest speakers • To serve others in need - supporting and encouraging others in the group and in the larger community, and insuring that all students knew about the consent forms for the next activity • To make one's own decisions rather than accepting someone else's rules and identify what is appropriate and the courage to stand by one's convictions - positive relationships formed in the group helped students to make positive decisions in their everyday lives
Self-Confidence • Each time a student successfully met a challenge self-confidence improved	**Self-Confidence** • Encouragement and support from group members • Celebration of each person's success
Self-Esteem • Invitation to participate in the intervention due to leadership skills • Thanking speakers • Final school assembly- pride in themselves and as member of school community	**Self-Esteem** • Sense of acceptance from the group improved students' belief that they are valuable • Support and encouragement from group whether successfully met challenge or not also improved students' belief that they are valuable

Self-Reflection • Academic sessions • Debriefing after activities	Self-reflection • Debriefing after activities with mentors- role modeling self-reflection • Individual sessions with students to discuss personal issues and how to face adversity
Sense of Belonging • Activities that encouraged groups to work together to overcome challenges in activities • Final school assembly	Sense of Belonging • Acceptance by others and real caring by adult mentors increased trust in relationships, and a sense of belonging to group and to school

Teacher participant #3 observed that the activities in the intervention were so varied that the intervention was able to reach all students. Every activity in the intervention provided various levels of challenge for the students and each time the students' successfully met those challenges, their level of confidence improved, and their willingness to attempt the next challenge strengthened. At the conclusion of each activity, the adult mentors debriefed with the students what they learned and reinforced that if students can successfully meet the challenge in the activity, they can take the same skills and successfully meet challenges in other aspects of their lives. Guest speakers and workshops were also provided that reinforced this same message, that if students believed in themselves, they could accomplish any goal.

Study participants' description of their experiences with the activities in the intervention is what Csikszentmihalyi defines as flow:

Flow is deep absorption in an activity that is intrinsically interesting. Individuals in a state of flow see the activity as worthwhile even if no further goal is reached. Flow is believed to occur at the point of balance between the challenge inherent in the task at hand and the skills required to accomplish it (1997, as cited in Friesen et al., 2009, p.12).

Thus Flow happens when a person's skills are fully involved in overcoming a challenge that is just about manageable, so it acts as a magnet for learning new skills and increasing challenges. If

challenges are too low, one gets back to flow by increasing them. If challenges are too great, one

can return to the flow state by learning new skills (Csikszentmihalyi, 1997). All study

participants discussed this concept as facing challenges throughout the program yet enjoying the

activities. Student participant #5 stated, "It was a fun experience, you met everybody….You

learn stuff that you need to work on in your everyday life so that's what the DYP program helps

you with." Student participant #3 stated, "Everything we tried out we thought there was no way

we can do this, and the more we tried, the more we had faith, the more we did it." Study

participant #1 stated, "It was fun and I enjoyed it a lot, but there were sometimes where it wasn't

fun. There were some activities that most people don't enjoy and I guess there's some other

activities that people enjoy." Students experienced flow when they were faced with challenges

that at first seemed unmanageable, but with their developing skills of resiliency they were able to

meet the challenge and master it.

   Comer (1995, as cited in Payne, 2005) suggests that no significant learning occurs without a

significant relationship. The adult mentors (university students, police liaison officer, SST)

provided the significant relationships necessary for learning to occur. The number of adult

mentors that were in the program significantly impacted the role relationships played in the

intervention. As teacher participant #1 stated, "It was not just one teacher and 25 students; it was

9 or 10 adults and 25 students." The adult mentors continuously modeled resilient behaviour

throughout the intervention. This intensive adult support provided students with an opportunity

to learn to relate to many different types of adults, and provided them with at least one adult with

whom they could connect. The intensive number of adults provided the adult mentors a strong

network of support for themselves as they worked together to discuss issues that arose during the

intervention, whether they were organizational in nature, or due to conflicts within the group, or

life issues that were shared by students. The development of healthy, supportive relationships was important as relationships seemed to have impacted many of the other skills of resiliency.

This intensive adult support and modeling of resiliency skills enabled a safe, trusting atmosphere to be developed where students were comfortable taking risks, and trying new skills. The adult mentors encouraged, supported and celebrated the successes of all members of their group. They made personal connections with students by remembering details and bringing them up in conversation. Genuine caring from mentors and a willingness to share their personal experiences with students, within healthy boundaries, along with a commitment to plan, prepare and participate in all activities was important in developing trust. When students realized that the adult mentors truly cared about them, they began to share their personal life struggles with their mentors. The adult mentors then used these opportunities to help students apply the lessons they learned during the intervention activities into their everyday life experiences. Thus the adult mentors provided the opportunity for students to take full advantage of what the activities offered and to extend that learning into all aspects of their lives.

Of all the activities, the YLCC camp was the most influential in deepening the level of trust between participants. These deeper trusting relationships fostered a stronger sense of belonging and pride in their school group, which increased students' engagement in their school community. Learning to trust others was a challenge for some students. As one student participant disclosed, trusting others was her biggest challenge. It is interesting that trust in relationships was not one of the criteria for evaluating changes in relationships on the RASP.

At the end of the intervention, teacher participant #2 observed that enough resilience had developed amongst the students in the intervention that the students had begun to rely on each other for support. This new peer network of support became very important when the university

mentors had concluded their school year and were no longer available. This peer support network insured that students would not become too dependent on the SST once the university mentors were gone.

The role that the SST chose to play in the lives of the student participants was instrumental in the success of the intervention. Their open and honest communication with students, and the consistent contact SSTs had with students, enhanced the relationship between the SST's and the students. As students deepened their trust in the SST, they became more willing to search out their teacher and seek their help when issues arose. Each time the SSTs met with the students either as a group or individually, the SST's extended the learning from the intervention by using consistent vocabulary and expressions, for example, "resiliency, discover your possibilities, meet that challenge, fall down seven, get up eight." Teacher participant #3 observed she was not sure how the students would have done if she had not had the level of involvement with her students that the intervention facilitated:

I can only imagine the trouble the students would have been in, or how many times they may have written off a class. I've had students thank me. One student wrote me a letter telling me how she had never really analyzed things too much and how the program changed her life, it helped her make some really tough decisions this year… I had given her a safe haven from a lot of drama that she experienced this year… she wants to be involved as a leader next year.

How the SSTs invited students into the intervention was also very important. The teachers came from a strengths perspective when speaking with students as to why they were selected to participate. Thus students had an immediate positive perspective not only of the intervention but also of themselves. The relationship with the SST changed at that moment, whether the student chose to participate or not, or agreed to participate and then sporadically attended the

intervention. The fact that this teacher genuinely saw something positive in them created a deeper level of mutual respect and trust, and students were more willing to openly discuss issues that were occurring in their lives with the SST. Students demonstrated how important the relationship with the SST was by how honoured they were when asked by the SST to complete a task on behalf of the group during intervention activities, by their exemplary behaviour at the celebration dinner, and by the gratitude they expressed at the end of the intervention.

Definition of Success

The question of defining success criteria for evaluating the intervention emerged during the teacher interviews. While teacher participants recognized that academic success is important and that the ultimate goal of a high school education is to attain a diploma, questions were raised as to whether academic skills should be the only indicator of a successful intervention. Teacher participant #3 stated, "I see these positive changes and I want other people to know that there's even more beyond their success in terms of the courses…I see other things that are big indicators of success as well." Teacher participants advocated for a more ecological definition of a successful student. Holloway and Salinitri's research (2010) also advocated for a more holistic definition of student success, and contended that social engagement within the broader school context should also be considered.

Teachers' definition of student success went beyond social engagement within the broader school context and included social engagement in the broader community in which students live. Success criteria identified by the teachers included improved attitudinal changes, problem-solving, resiliency, social engagement within the intervention group and within the broader school community, and social responsibility. "Students realized that it's not just about them

now, it's about them in context of the community and other people as well" (teacher participant #3). Teacher participant #3 also stated:

Students have learned, that there's a purpose behind life, that there is meaning in it…that it is important to keep striving to do better because that's where happiness in life comes from….It's not only in just getting these kids to graduate... it's about becoming responsible contributing members of our society….We want these kids to graduate, we want these kids to be happy in life.

It seems that the intervention improved resiliency skills by meeting the American National Research Council's (2003) goal of deep cognitive engagement that results in learning.

LIMITATIONS

Due to the small sample size, 59 student participants, generalisability is not possible. The instrument used to assess the development of resiliency skills did not consistently match the goals of each of the activities in the intervention. Thus quantitative results seem to conflict with qualitative results. This study involved evaluating program outcomes of an intervention over the span of one year. Longitudinal studies need to be conducted in order to conclusively determine whether or not the intervention succeeded in meeting its goals.

A control group was not possible as ethics required that the intervention be offered to all at-risk grade 10 students and not enough students declined the offer to participate in the intervention to make a control group. Thus the comparison of academic data is fraught with many confounding variables as the first year of high school is very different from the second year of high school. It is also difficult to determine the full effectiveness of the intervention on resiliency without assessing how resiliency may or may not have developed within a control group.

RECOMMENDATIONS

Applying the intervention to a larger sample size is needed in order to determine the generalisability of the intervention. A control and experimental group would help limit confounding variables when evaluating academic success measures and resiliency skills. A control and experimental group would also assist in analyzing the depth to which the intervention affects outcomes. A resiliency survey more specifically tied to the goals of the activities in the intervention would provide clearer data as to what extent the components of the intervention contribute to resiliency.

Attendance and commitment to all sessions was the key to success in the intervention. Teacher participant #2 stated:

> I started with about 36 students who said yes to the program and they didn't really know what they were saying yes to… Some of those students are still in the school, some aren't, some came to a few and then were kind of patchwork through it and some lasted all the way through. For whatever reasons they were able to say yes, and they were able to come to the first or second one [activity], and then weren't able to carry through while others were more independent.

Further study is needed in order to identify the factors that led some students to be unable to make a commitment to the intervention. Once the barriers that prevented full participation of students are identified, those barriers can be removed so that all students will be able to fully access the intervention.

The relationships that were developed in the intervention and the activities that were provided were key components to the success of the intervention. Commitment of human resources from the Windsor–Essex Catholic District School Board (WECDSB), the University of Windsor, and

the Windsor and LaSalle police forces was instrumental in providing a high adult to student ratio in the intervention. This high ratio provided the intensive one-on-one support that students needed to move completely out of their comfort zone and integrate resiliency skills. This finding reinforces Boydell et al.'s (2005) research that a relationship between one significant adult and a disengaged student can make the difference between a student dropping out or staying in school. It was Boydell et al.'s research that informed the Ministry of Education's student success strategy[2]. In order for this intervention to continue to be effective, the partnerships between the WECDSB, University of Windsor and Windsor and LaSalle police service need to continue.

The specific role that the SST played in the intervention was especially crucial to the success of the intervention. The relationship the SST had with the students prior to inviting them to participate in the intervention was vital to the students' willingness to participate. Unger (2010) hypothesizes that helping professionals are likely to be effective in developing resiliency in others when they involve interventions over time. The SSTs found that the amount of time they had to connect with the students due to the length and intensity of the intervention enhanced their relationships with the students and created deeper levels of trust and mutual respect. This enhanced relationship with students allowed the SSTs to engage in the whole life of the student. Thus the intervention permeated the entire lives of the students. This experience increased the students' sense of belonging to the school community. Two key ingredients in mediating disengagement is a relationship with a significant adult and a sense of belonging to the school community. Therefore teachers who are in the SST role need to engage the whole student and not just address academic issues in order to affect positive change in these students' lives.

[2] Student Success is a province-wide strategy initiated by the Ontario Ministry of Education to ensure that every student is provided the support needed to successfully complete high school and to pursue their post-secondary goals. Retrieved from the following website: http://www.edu.gov.on.ca/eng/teachers/studentsuccess/strategy.html

The intervention enabled the WECDSB to meet Boydell et al.'s (2005) recommendations that schools need to be more understanding, more flexible, and more proactive in addressing the needs of at-risk youth and it allowed the WECDSB to maximize the SST position in their schools. This intervention also enabled the WECDSB to meet all three criteria of the Ontario Ministry of Education Student Success/Learning to 18 Initiative's fourth pillar of student success: community, culture and caring (Ontario Ministry of Education, 2008). The intervention created a caring school community and created a safe and supportive school climate for at-risk youth. If other boards implement this intervention for their at-risk students, they will be maximizing the SST position in their schools as well as successfully meeting the criteria of the Ministry of Education's fourth pillar of student success.

The intervention provided the WECDSB with an effective program to support the Ministry of Education's Learning to 18 mandate, which requires students to remain in school until either successfully achieving a diploma, or until the age of 18 (Ontario Ministry of Education, 2010). Previous to this mandate students could drop out of high school at the age of 16. Attendance of at-risk youth who struggle and are not engaged in school becomes more problematic with each grade level. Friesen et al. (2009) found that attendance of students fell steadily as grade level increased. The Learning to 18 mandate requires schools to attempt to reengage students who have poor attendance in school. Without specialized programming, such as the intervention provides, the task of re-engaging at-risk youth so that they will consistently attend school becomes an almost impossible task if the school is not offering something different from what it has already offered.

Prior to the Learning to 18 mandate students could drop out of high school at the age of 16, which is generally the grade 10 year. Schools did not have to offer programs or attempt to

engage at-risk youth and students were often encouraged to either put forth more effort in academics and attendance or drop out of school. As has been investigated in this study, the grade 10 year tends to be the most difficult year for students in high school. Therefore the grade 10 year is the best year to offer this intervention.

Another reason why the grade 10 year is the best fit for this intervention is that the grade 10 year lacks a focus. The focus for the grade 9 year has been and continues to be transition to high school. A variety of programs and activities, such as Link Crew [3], are provided in schools to assist grade 9 students in successfully transitioning to high school. Preparing for post secondary destinations is the area of focus for grades 11 and 12. Increased contact with guidance counselors occurs in these senior years as students have fewer compulsory courses to take and need to select courses that will lead to their post secondary destination. A variety of activities and programs are provided at these grade levels to assist students in selecting what career, college or university program they want to pursue.

In the grade 10 year students take a compulsory half credit course in careers. At the conclusion of this course many grade 10 students are still uncertain as to what they want to do after high school. Grade 10 students, like grade 9 students, still have to take five compulsory courses. Therefore they have few opportunities to take courses in which they have a lot of personal interest; nor have they had much opportunity to try a variety of different curriculum areas in order to determine where their interests and strengths lie. Thus, offering the intervention in grade 10 provides a focus for the students and an opportunity to participate in activities in which they have a lot of interest and in which they can discover their strengths.

Another advantage of offering this intervention in the grade 10 year is that teachers can

[3] Link Crew is a high school orientation and transition program that has demonstrated the ability to improve academic achievement and adaptive school behavioural outcomes in high school freshman.

utilize the enhanced relationship developed with the students to continue to support and assist students in attaining their high school diploma and in planning for their post secondary destinations. Since the SSTs now know their students better, they will be better able to assist them over the next two to three years of high school. If students have the opportunity to continue to be involved in the intervention as a leader for the next two to three years of high school, then their continued involvement in the intervention will assist them in solidifying the attainment of new resiliency skills and also help them to develop leadership skills. Students can then become contributing members not only of their school community but also of the larger community in which they live.

Persistence in attaining a goal was a key lesson taught throughout the intervention to develop resiliency. Thus a key purpose of the intervention was to change the thinking of student participants. The intervention changed students' thinking through the environment that was created. This environment was not a fixed environment. Therefore the environment needs to continuously be created and offered to the students in order to provide the opportunity for students to solidify their new way of thinking until it becomes permanent. Sustained funding is needed so that the intervention and the SST position will continue to be provided.

Sustained funding is also necessary so that each year the SSTs can begin planning and focus their energies on program enhancements rather than wondering if and how the program will continue to be offered. Sustained funding will also enable the intervention to be offered to more students, while providing current student participants the opportunity to continue to be involved in the intervention as a leader. As teacher participant #3 stated:

> I wholeheartedly believe in this program, in the idea that there are so many teens that have
>
> fallen between the cracks that need this little bit of extra attention. We look at how much we

spend per student… it was quite a large amount, but the impact that these opportunities

have given the students is like the MasterCard commercial. It's priceless. You can't put a

price on it… Without this particular program the students would not have had that connection

here at school, or a caring adult, or the opportunity to experience something different, or to

feel something special or to feel safe, to be able to take risks, to realize that they can take risks

and deal with the consequences good or bad, they would never have an opportunity to just

reflect on that. I've had kids come up to me and thank me….I knew [one student] liked DYP

and she wrote me this really touching letter about how it changed her life, it helped her make

some really tough decisions this year, and … she wants to be involved as a leader [next year].

Sustained funding to continue the intervention is required in order to successfully meet the

mandate of Learning to 18, meet the criteria of the fourth pillar of student success, increase the

graduation rate and solidify the change in thinking of the student participants.

Resiliency is a multifaceted concept and occurs on various levels. Therefore various levels of

intervention are needed. One way to expand the effectiveness of the intervention is to include

more community partners and family members. Including more community partners is

important as university mentors may not be consistent from year to year and many of the

university mentors do not live in the students' neighbourhoods. Access to positive role models

within their neighbourhood would expand the resilient environment of the students. The

inclusion of the community police liaison officer has provided this community resource in their

neighbourhoods, but more adult neighbourhood mentors are needed. Involving students'

families will also broaden the scope of the intervention. Expanding the availability and

consistency of positive mentors will allow the intervention to have a more ecological approach

which should provide a more profound impact on the development of resiliency.

Longitudinal studies are needed to assess the effectiveness of the intervention over time. Teacher participant #1 stated:

Student resiliency is an interesting topic because we will only know that they're resilient when we meet them 10 or 15 years down the road, for sure….If we can do another study, in another 10 years and come back and see where they are now and what they're doing, then we'll have a really good measure of how resilient these students are…I think we're helping to make them more resilient. They're already survivors but being a survivor just isn't good enough. You want to be a survivor that can move forward and progress in life… make them resilient so that not only are they surviving, they're looking forward to the future with optimism. And we'll know that in a few years.

Longitudinal studies will help us better understand how the intervention affected resiliency, and how to improve components of the program in order to better enhance the learning of resiliency. As teacher participant #3 stated:

…you don't know what's going to happen beyond our contact with these kids. I like that expression where we're planting the seeds now, but we don't know when, or how much fruit is going to come from it later. We probably won't get to witness a fraction of the positive impact from this particular program and student success in general.

Further longitudinal studies were also recommended by the authors of the RASP in order to discover if resilient individuals exhibit different behaviors than non-resilient individuals and to discover if behavioral differences result from different levels of resiliency. The researchers contend that these questions need to be answered in order to validate the goal of resiliency as a programming outcome (Allen and Hurtes, 2001).

Ongoing evaluation of the intervention is important in order to continually improve the program and better meet the academic and personal needs of at-risk youth. The importance of continuing to offer intervention programs while conducting longitudinal studies was reiterated by Bell in his article *Cultivating Resiliency* (2001, pp. 379-390). He states:

> When I was in medical school I was told that, if a child came into my office with a rat bite, and I sat in my office, examined the child, and then gave the child a tetanus shot, some antibiotics, and carefully dressed the wound, I would be a good doctor. If however, 100 children from the surrounding community came into my office, each with rat bites, and I sat in my office, examined the child, and then gave the child a tetanus shot, some antibiotics, and carefully dressed the wound and that was all – then I should have my medical license revoked. The reason being that I did not go into these children's community and get rid of the rat. In this case the rat is a lack of vision and leadership to insist that society provide lessons in resiliency in our children.

While longitudinal studies are conducted the intervention needs to be continued as the intervention has demonstrated that it positively affects students' academic success, and improves their level of resiliency.

CHAPTER VI

CONCLUSION

The results of this study indicate that the intervention had a positive effect on academic success as identified by student engagement: increase in attendance, decrease in the number of times late for class, improved credit accumulation and increase in grade point average (GPA), for those students who participated more fully in the intervention. While the quantitative data results indicate that there is no relationship between resiliency and the intervention, the qualitative data indicates that the intervention positively affected resiliency for those students who were more fully engaged in the intervention. Relationships and the activities in the intervention were identified by study participants as the key components of the intervention that positively affected resiliency.

APPENDICES

Appendix A

Resiliency Attitudes and Skills Profile (RASP)

The following items relate to your opinions of yourself and your personal characteristics. Please read the following statements and indicate the extent to which you agree or disagree with each one. **There are no right or wrong answers, so please be as honest as possible!**

	STRONGLY DISAGREE					STRONGLY AGREE
1. When my work is criticized, I try harder the next time.	1	2	3	4	5	6
2. I can deal with whatever comes in the future.	1	2	3	4	5	6
3. Once I set a goal for myself, I don't let anything stop me from reaching it.	1	2	3	4	5	6
4. I learn from my mistakes.	1	2	3	4	5	6
5. I notice small changes in facial expressions.	1	2	3	4	5	6
6. I can imagine the consequences of my actions.	1	2	3	4	5	6
7. I know when I'm good at something.	1	2	3	4	5	6
8. I'm prepared to deal with the consequences of my actions.	1	2	3	4	5	6
9. I say "no" to things that I don't want to do.	1	2	3	4	5	6
10. I can change my behavior to match the situation.	1	2	3	4	5	6
11. My sense of humor makes it easier to deal with tough situations.	1	2	3	4	5	6
12. My friends know they can count on me.	1	2	3	4	5	6
13. I can change my surroundings.	1	2	3	4	5	6
14. My family is there for me when I need them.	1	2	3	4	5	6

15. When something goes wrong, I can tell if it was my fault.	1	2	3	4	5	6
16. It's OK if I don't see things the way other people do.	1	2	3	4	5	6
17. Lying is unacceptable.	1	2	3	4	5	6
18. I avoid people who could get me into trouble.	1	2	3	4	5	6
19. It's OK if some people do not like me.	1	2	3	4	5	6
20. I am comfortable making my own decisions.	1	2	3	4	5	6
21. I can sense when someone is not telling the truth.	1	2	3	4	5	6
22. When I'm faced with a tough situation, I come up with new ways to handle it.	1	2	3	4	5	6
23. I can come up with different ways to let out my feelings.	1	2	3	4	5	6
24. I choose my friends carefully.	1	2	3	4	5	6
25. I look for the "lighter side" of tough situations.	1	2	3	4	5	6
26. I control my own life.	1	2	3	4	5	6
27. I can tell what mood someone is in just by looking at him/her.	1	2	3	4	5	6
28. I try to help others.	1	2	3	4	5	6
29. I stand up for what I believe is right.	1	2	3	4	5	6
30. I try to figure out things that I do not understand.	1	2	3	4	5	6
31. I'm good at keeping friendships going.	1	2	3	4	5	6
32. I have friends who will back me up.	1	2	3	4	5	6
33. Laughter helps me deal with stress.	1	2	3	4	5	6

34. I avoid situations where I could get into trouble.	1	2	3	4	5	6

Resiliency Attitudes and Skills Profile (RASP)

CREATIVITY: 6, 22, and 23

HUMOR: 11, 25, and 33

INDEPENDENCE: 2, 9, 16, 19, 20, 26, and 34

INITIATIVE: 1, 3, 13, and 30

INSIGHT: 4, 5, 7, 10, 15, 21, and 27

RELATIONSHIPS: 12, 14, 18, 24, 31, and 32

VALUES ORIENTATION: 8, 17, 28, and 29

There are no reverse coded items.

Message				

From:	Karen Paisley <Karen.Paisley@health.utah.edu>
Subject:	RE: RASP survey
Date:	Thu, 15 Dec 2011 09:52:39 -0700
To:	Kathleen Furlong <furlong@uwindsor.ca>

Of course you may still use it. Do you still have the files, or do you need me to re-send. Let me know what you find?

 Thanks, Karen
Karen Paisley, PhD
Associate Dean, College of Health
Associate Professor, Department of Parks,
 Recreation, & Tourism
University of Utah
Please consider the environment before printing this e-mail

 From: Kathleen Furlong [mailto:furlong@uwindsor.ca]
Sent: Wednesday, December 14, 2011 7:49 PM
To: Karen Paisley
Cc: sgeri@uwindsor.ca
Subject: RASP survey
Importance: High

 Dear Dr. Paisely,

In the fall of 2009, Dr. Victoria Paraschak, University of Windsor, had requested permission on my behalf, a Masters of Education student at the University of Windsor, to use the Resiliency Attitudes and Skills Profile as a survey instrument for research I was planning on conducting on a program designed to increase resiliency in at-risk youth. An email was sent to Dr. Paraschak stating that you gave permission for the RASP to be used, and the RASP and answer key was sent to Dr. Paraschak.

Since conducting the research for this study I resigned from my position as a principal in Windsor, accepted a principalship in London Ontario and moved offices and residences. I have lost the copy of the original email granting permission to use the RASP survey.

I have completed my research and am requesting an email indicating that permission to use the RASP for the study has been granted. I will incorporate the email into my thesis paper. Is it possible to receive an email indicating that I have permission to use this survey?

Thank you for your time and consideration.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Kathy Furlong

Appendix B

SST Script to Invite Students to Participate in Intervention and Study
School Information Letter and Commitment Form
University Consent and Assent Forms
Approval for Research from Windsor-Essex Catholic District School Board

SST Script to Invite Students to Participate in Intervention and Study

"We are participating in a study that is being conducted by Mrs. Kathy Furlong, a Masters of Education student at the University of Windsor. She is doing research to see if our Discover Your Possibilities program increases students' resiliency skills and academic success. Resiliency is the ability to successfully meet life's challenges. Whether you chose to participate in the Discover Your Possibilities program or not, we would like you to participate in the study. This is completely voluntary. If you decide to participate in the study this will mean you will complete a survey of your resiliency skills before we start the Discover Your Possibilities program in September and again in May at the conclusion of the program. The survey will take place here at school and will take about 15 minutes to complete each time. I will assign you a number. Mrs. Furlong will not know your name nor will she be able to identify you or match you to the survey. At the end of the school year, Mrs. Furlong will also review your school attendance and lates, how many credits you completed and your grade point average. Please know that you do not have to participate in this study in order to participate in the Discover Your Possibilities program. Let's review the Parent Consent Form, the Student Assent Form and the Commitment Form for the Discover Your Possibilities program. Ask any question you may have as we go through the forms and I will answer them the best that I can. If I cannot answer the question I will contact Mrs. Furlong and get the answer to you."

Once the forms have been reviewed the SST will remind the students of the following: "Remember you have the following choices: you can participate in the Discover Your Possibilities program and not the study. You can participate in both the study and the Discover Your Possibilities program   What do you want to do?"

The SST will give the appropriate forms to the student based on their choice as to which they want to participate in, and inform the student as to the deadline for submitting the forms. The deadline must be before the DYP program begins. The SST will conclude by providing the appropriate forms to the student and then stating:

"Talk to your parents about the choice(s) you have made. If your parents have any questions about the Discover Your Possibilities program they can contact me or Mrs. Furlong. If they have questions about the study, they can contact Mrs. Kathy Furlong. Mrs. Furlong's name and phone number is on the Parent Consent Form for the study. Remember that the forms need to be signed and returned to me in five days."

School Information Letter and Commitment Form for Participation in Intervention

Discovering Your Possibilities Program

Congratulations! You have been selected to participate in this year's **Discover Your Possibilities** program. The purpose of this program is to provide various opportunities to assist young people in developing leadership, teamwork, resiliency skills, and to increase academic success. University of Windsor students from the Faculties of Kinesiology and Education will be facilitating this program with our Student Success Teacher. The university students will act as mentors and will work with our students to provide academic support as well as plan monthly activities.

The program will occur during the 2nd and 4th Friday of every month starting in September and ending in May. One Friday will be academically related and the other Friday will include physical activities, team building, leadership skills, and community outreach. Some of these activities will occur during the school day, some of the activities may occur during the student's own time, i.e. during the evening or during a weekend. During the year there will be larger group activities involving multiple schools, i.e., Ropes Course, overnight camping, Ojibway Park, Therapeutic Riding.

At the conclusion of the program, a graduation celebration will take place where each student will receive a yearbook of the program and a certificate of recognition for their strengths. There is no cost for this program.

Please note that it is understood that students who sign up for this program are making a commitment to participate in the full year program, and not just one or two of the activities.

If you would like to participate in this full year program, please sign the attached consent form and have your parents'/guardians' sign as well.

If you have any questions please contact *(SST name and contact info)*

Sincerely,

(SST name)

Commitment Form for Discover Your Possibilities

I have read the information regarding the **Discover Your Possibilities** program and agree to participate in this full year program. I understand that the commitment I am making is to participate in the activities planned throughout the school year and that if I chose to withdraw from the program I will inform the Student Success Teacher.

Student Name (Please Print): _____

Student Signature: **_____**

Parent Name (Please Print): **_____**

Parent Signature: **_____**

Please return this signed form to *(SST name)* **by** *(due date)*

University of Windsor Consent Form to Windsor-Essex Catholic District School Board to Participate in Study

Windsor-Essex Catholic District School Board

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: Discovering Your Possibilities

You are asked to participate in a research study conducted by Mrs. Kathy Furlong, Dr. Geri Salinitri, Dr. Kara Smith from the Faculty of Education, as well *as* Dr. Victoria Paraschak from the Faculty of Kinesiology at the University of Windsor. The results of this study will be contributed to Mrs. Kathy Furlong's thesis paper. If you have any questions or concerns about the research, please feel to contact Mrs. Kathy Furlong at 519-734-6444, ext. 17 or Dr. Salinitri at 519-253-3000, ext. 3961.

PURPOSE OF THE STUDY
The purpose of this study is to assess whether the Discovering Your Possibilities program increases resiliency skills and academic success for students. Resiliency is the ability to successfully meet life's challenges.

PROCEDURES
If your child volunteers to participate in this study, s/he will be asked to:
1) Complete a survey of resiliency skills at the beginning of the school year, prior to the start of the Discovering Your Possibilities program in September.
2) Complete the survey again at the conclusion of the Discovering Your Possibilities program, in May.
*This survey will take about 15 minutes to complete each time and will be completed at the student's school.
3) At the conclusion of the Discovering Your Possibilities program, we would like to review the following data for your child: school attendance and lates, and the number of credits attained.
4) If your child is choosing not to participate in the Discovering Your Possibilities program, we would like your child to participate in this study so that we can evaluate whether or not the Discovering Your Possibilities program increases the level of resiliency of the students who participate in the program. This would mean that your child would complete the surveys on resiliency and we would review their school attendance and lates and the number of credits attained.
5) Your child will receive the results of the study. Any student who wants to review the individual results of their surveys will be given the opportunity to meet with the researcher to review these results.

POTENTIAL RISKS AND DISCOMFORTS
At any time during the study, if you are uncomfortable completing survey or interview questions, you are not required to continue with that question or the survey.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
This study evaluates the Discovering Your Possibilities Program, which should prove to be beneficial to the participants. Students will gain resiliency skills which will help them to improve academic success and in meeting life's challenges. The results obtained from this type of investigation will help us to

evaluate the effectiveness of this program on increasing resiliency skills and academic success.

COMPENSATION FOR PARTICIPATION
Participants will not receive payment for participating in this study.

CONFIDENTIALITY
Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. All information will remain in the researcher's office in a locked cabinet. Only the researchers will have access. Participants have the right to review the taped interviews and may request edits to be made. As soon as the data has been analyzed and the report completed to the satisfaction of the stakeholders, including the participants, it will be shredded, and the audio tapes will be erased.

PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. The participant can request to have their data removed from the study at any time.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS
The overall results of the study will be posted in the Research Ethics Board website of the University of Windsor. The participants will have the right to get specific information in connection with the score they attain in the Resiliency Attitudes and Skills Profile, and the researchers will set up a time to share that with any individual participant that requires to have such feedback.

Web address: http://www.uwindsor,ca
Date when results are available: July 2011

SUBSEQUENT USE OF DATA
This data will be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS
You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____   _____
Signature of Investigator   Date

PARENTAL CONSENT TO PARTICIPATE IN RESEARCH

Dear Parents/Guardians:

Title of Study: **Discovering Your Possibilities**

Your child is asked to participate in a research study conducted by Mrs. Kathy Furlong, Dr. Geri Salinitri, Dr. Kara Smith from the Faculty of Education, as well as Dr. Victoria Paraschak from the Faculty of Kinesiology at the University of Windsor. The results of this study will be contributed to Mrs. Kathy Furlong's thesis paper. If you have any questions or concerns about the research, please feel to contact Mrs. Kathy Furlong at 519-734-6444, ext. 17 or Dr. Salinitri at 519-253-3000, ext. 3961.

PURPOSE OF THE STUDY
The purpose of this study is to assess whether the Discovering Your Possibilities program increases resiliency skills and academic success for students. Resiliency is the ability to successfully meet life's challenges. This program is based on academic challenges.

PROCEDURES
If you would like your child to participate in this study, s/he will be asked to:
1) Complete a survey of resiliency skills at the beginning of the school year, prior to the start of the Discovering Your Possibilities program in September.
2) Complete the survey again at the conclusion of the Discovering Your Possibilities program, in May.
*This survey will take about 15 minutes to complete each time and will be completed at the student's school.
3) Access to records must be given for research purposes

POTENTIAL RISKS AND DISCOMFORTS
At any time during the study, if you are uncomfortable completing any survey question, you are not required to continue with that question or the survey.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
This study evaluates the Discovering Your Possibilities Program, which should prove to be beneficial to the participants. Students will gain resiliency skills which will help them to improve academic success and in meeting life's challenges. The results obtained from this type of investigation will help us to evaluate the effectiveness of this program on increasing resiliency skills and academic success.

COMPENSATION FOR PARTICIPATION
Participants will not receive payment for participating in this study.

CONFIDENTIALITY
Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. All information will remain in the researcher's office in a locked cabinet. Only the researchers will have access. As soon as the data has been analyzed and the report completed to the satisfaction of the stakeholders, such as students, parents,

teachers, the researcher and the professors overseeing this study, as well as the Windsor-Essex Catholic District School Board, it will be shredded.

PARTICIPATION AND WITHDRAWAL
You can choose whether you want your child to be in this study or not. If your child volunteers to be in this study, they may withdraw at any time without consequences of any kind. Your child may also refuse to answer any questions they don't want to answer and still remain in the study. The investigator may withdraw your child from this research if circumstances arise which warrant doing so. You can request to have your child's data removed from the study at any time.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS
The overall results of the study will be posted in the Research Ethics Board website of the University of Windsor. You will have the right to get specific information in connection with the score your child attained in the Resiliency Attitudes and Skills Profile from the researcher, Mrs. Kathy Furlong. You can contact her (her information is found at the top of this letter) and she will set up a time to share that information with you.

Web address:
https://webmail1.uwindsor.ca/Redirect/web4.uwindsor.ca/units/researchEthicsBoard/studyresultforms.nsf/VisitorView?OpenForm&count=-1

Date when results are available: July 2011

SUBSEQUENT USE OF DATA
This data will be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS
You may withdraw your consent at any time and discontinue your child's participation without penalty. If you have questions regarding your child's rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE
I understand the information provided for the study **Discovering Your Possibilities** as described herein. My questions have been answered to my satisfaction, and I agree for my child to participate in this study. I have been given a copy of this form.

_____   _____
Name of Parent/Guardian   Name of Child

_____   _____
Signature of Parent/Guardian   Date

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____   _____
Signature of Investigator   Date

Assent Form for Secondary School Students

I am a university student researcher, and I am doing a study on resiliency. Resiliency is the ability to successfully meet life's challenges. I would like to ask you to complete a survey on resiliency that is called a Resiliency Attitudes and Skills Profile (RASP). I would like you to complete this in September and again in May, to see if your resiliency skills have increased, remained the same, or decreased. This is a completely voluntary request. You do not have to participate in this study. Your name will not appear on the survey. Your student success teacher will assign you a number and I will only know you by number. The student success teacher will not have access to your surveys.

When I am finished assessing the RASP with all the students who agree to be in my study, I will write a thesis paper on what I have learned. My professors will read it, and it might be published in a book, or in an educational journal, but no one will know who the students are that answered my questions. If you want the individual results of your RASP assessment, I will give you that information. I will also give you information on the results of my study.

I want you to know that all your information will be kept confidential, I will not give out your RASP score to your teachers or parents or any other students. The only exception to confidentiality is if you tell me that someone has been hurting you. If I think that you are being hurt or abused I will need to tell your parents or someone else who can help you. Otherwise, I promise to keep everything that you tell me confidential.

Your parent(s)/guardian(s) have given their consent for you to complete the resiliency survey (the RASP). There are no consequences if you choose not to participate in this study. If you decide to do the survey, you can stop answering the questions on the survey at any time, and you don't have to complete any question on the survey you do not want to answer. It's entirely up to you.

If you are willing to participate in this study and complete the RASP in September and again in May, please sign and return this form to your Student Success Teacher.

I understand what I am being asked to do to be in this study, and I agree to be in this study.

_____   _____
  Signature   Date

_____   _____
      Witness   Date

Approval Email from Windsor-Essex Catholic District School Board to Conduct Research

Title: Research Proposal: Discovering Your Possibilities from Risk to Resilience : Windsor-Essex CDSB
Page 1 of 2
Wednesday, October 06, 2010 3:42:08 PM
Research Proposal: Discovering Your Possibilities from Risk to Resilience
From: Celeste DiPonio

Dear Ms. Kathy Furlong:

Title of Study: Discovering Your Possibilities from Risk to Resilience

Assistant Superintendents Mike Seguin and JoAnne Shea have granted approval for you to conduct your research proposal with the following secondary schools at the Windsor-Essex Catholic District School Board with respect to the above proposal.

Please contact the principal directly. It will be at the principal's discretion if she/he wishes to participate.

Note: I have also attached our Board Policy. If you should have anyfurther questions, please do not hesitate to contact our office at (519) 253-2481 Ext. 1233.
We wish you every success with your research.

Celeste DiPonio
Executive Assistant to
Superintendent of Student Achievement K - 12
and Assistant Superintendents of Education
Windsor-Essex Catholic DSB
(519) 253-2481 ext. 1293
celeste_diponio@wecdsb.on.ca

Please be advised that there are individuals within the Catholic Education Centre who are sensitive to fragrances and/or scented products which can pose a health risk. We kindly ask participants to refrain from wearing fragrances and/or scented products while in this building.
The information in this e-mail is intended solely for the addressee(s) named, and is confidential. Any other distribution, disclosure or copying is strictly prohibited. If you have received this communication in error, please reply by e-mail to the sender and delete or destroy all copies of this message and any attachments.

Appendix C

SST Pre Test (RASP Instrument) Script for Students

"Thank you for your willingness to participate in this study. Mrs. Furlong is a Masters of Education student at the University of Windsor. She wants to find out if the Discover Your Possibilities program increases students' resiliency skills and academic success. Resiliency is the ability to successfully meet life's challenges. The results of this study will help teachers, and parents to help you and other students to develop resiliency and do better in school. Mrs. Furlong would like you to complete the Resiliency Attitudes and Skills Survey.

Participating in this survey is completely voluntary. The survey will take about 15 minutes to complete. I will assign you a number. Please put that number on the survey. Mrs. Furlong will not know your name nor will she be able to identify you or match you to the survey. At the end of the Discover Your Possibilities program in May, she will ask you to complete this survey again. She will also review your school attendance and lates, how many credits you completed and your grade point average. Please know that you do not have to participate in this study in order to participate in the Discover Your Possibilities program.

 At any time you can choose to withdraw from this study without any consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study.   You can request to have your data removed from the study at any time. Do you have any questions or concerns?

Please answer the questions honestly and to the best of your ability. When you are done, please place the survey in the envelope provided, seal the envelope and hand the envelope in to me."

Appendix D

Instructions and SST Script for Post-test RASP

Note: the post-test RASP and the peer selection for audio interviews activity should be done during the

same meeting – the peer selection can be done immediately after the students complete the RASP.

Posttest RASP - Instructions:

1. Prior to meeting with students:

a) Copy the RASP survey on coloured paper – this will assist in keeping the pre-test separate from

the post-test.

b) Using the spreadsheet from the pre-test RASP, assign a new code to the students that will match

the previous code, i.e. C-1 becomes 2C-1

2. Completing the RASP

a) Distribute the RASP surveys to the students

b) Read the following script to the students:

"Do you remember that at the beginning of the Discover Your Possibilities program you were asked if

you would also be willing to participate in a study that is being done by Mrs. Furlong, a Masters of

Education student at the University of Windsor? In this study she wants to find out if the Discover Your

Possibilities program increases students' resiliency skills and academic success. Resiliency is the ability

to successfully meet life's challenges. The results of this study will help teachers and parents to help you

and other students to develop resiliency and do better in school. Mrs. Furlong would like you to complete

the Resiliency Attitudes and Skills Profile again now that the DYP program is completed.

Participating in this survey is completely voluntary. The survey will take about 15 minutes to

complete. I will give you the number I assigned you in September. Please put that number on the survey

with the number 2 in front of it. For example if your number was C-1, then you would write 2C-1. Mrs.

Furlong will not know your name nor will she be able to identify you or match you to the survey.

You do not have to complete this survey; you can choose to withdraw from this study without any consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study.   You can request to have your data removed from the study at any time. Do you have any questions or concerns?

Please answer the questions honestly and to the best of your ability. When you are done, please place the survey in the envelope provided, seal the envelope and hand the envelope in to me."

c) Provide students with their number to put on the front of the survey sheet

It is vital that the number the student had for the pre-test matches the number for the post-test

Appendix E

Script for SST - Instructions for Peer Selection for Audio Interviews

Instructions for Peer Selection for Audio Taping

a) Once the RASP surveys are collected, distribute a piece of paper to each student.

b) State the following:

"Mrs. Furlong would also like to interview two students from our group about their experiences in the Discover Your Possibilities Program. She is looking at how the program may have contributed to resiliency skills. Resiliency is the ability to overcome obstacles. The skills for resiliency that we just looked at in the RASP involve creativity, humour, independence, initiative, insight, relationships, and values orientation.

On the paper you have been given, write down the name of one male and one female from our group who can best talk about the activities in the DYP program that contributed to resiliency skills."

c) Collect the papers from the students

d) Determine which male and which female were selected by their peers to be interviewed by the researcher.

e) Ask those students if they are willing to be interviewed.

f) If not, move to the person who was the students' second choice, and continue to go down the list until a student agrees to be interviewed.

g) Students who are willing to be interviewed need to be given consent and assent forms for the interview

h) Meet with the students who are willing to be interviewed, distribute the required consent and assent forms, then read this script to them

Appendix F
University of Windsor Consent Form for Audio Taping for Windsor-Essex Catholic District School Board
Approval Email From Windsor-Essex Catholic District School Board
SST Script for Student Audio Interviews
University of Windsor Consent and Assent Forms

University of Windsor Consent Form for Audio Taping for Windsor-Essex Catholic District School Board

Windsor-Essex Catholic District School Board
LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **Discovering Your Possibilities**
You are asked to participate in a research study conducted by Mrs. Kathy Furlong, Dr. Geri Salinitri, Dr. Kara Smith from the Faculty of Education, as well *as* Dr. Victoria Paraschak from the Faculty of Kinesiology at the University of Windsor. The results of this study will be contributed to Mrs. Kathy Furlong's thesis paper. If you have any questions or concerns about the research, please feel to contact Mrs. Kathy Furlong at 519-969-1883 or Dr. Salinitri at 519-253-3000, ext. 3961.

PURPOSE OF THE STUDY
The purpose of this study is to assess whether the Discovering Your Possibilities program increases resiliency skills and academic success for students. Resiliency is the ability to successfully meet life's challenges. This program is based on academic challenges.

PROCEDURES
If you would like your students and teachers to participate in this aspect of the study, they will be asked to:
1) Participate in an interview, that will be taped, conducted by Mrs. Kathy Furlong or Dr. Geri Salinitri
2) Access to records must be given for research purposes

POTENTIAL RISKS AND DISCOMFORTS
At any time during the interview, if participants are uncomfortable answering a question, they are not required to continue with that question or the interview itself.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
This study evaluates the Discovering Your Possibilities Program, which should prove to be beneficial to the participants. Students will gain resiliency skills which will help them to improve academic success and in meeting life's challenges. The results obtained from this type of investigation will help us to evaluate the effectiveness of this program on increasing resiliency skills and academic success.

COMPENSATION FOR PARTICIPATION
Participants will not receive payment for participating in this study.

CONFIDENTIALITY
Any information that is obtained in connection with this study and that can be identified with a participant will remain confidential and will be disclosed only with their permission. All information will remain in the researcher's office in a locked cabinet. Only the researchers will have access. As soon as the data has been analyzed and the report completed to the satisfaction of the stakeholders, such as students, parents, teachers, the researcher and the professors overseeing this study, as well as the Windsor-Essex Catholic District School Board, it will be erased and shredded.

PARTICIPATION AND WITHDRAWAL
Participants can choose whether to participate in this interview or not. If they volunteer to participate in the interview, they may withdraw at any time without consequences of any kind. They may also refuse to answer any questions they don't want to answer. The investigator may withdraw a participant from this research if circumstances arise which warrant doing so. The participant can request to have their data removed from the study at any time.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS
The overall results of the study will be posted in the Research Ethics Board website of the University of Windsor. Participants will have the right to get specific information in connection with their individual answers to the interview questions from the researcher, Mrs. Kathy Furlong. Her contact information is found at the top of this letter and she will set up a time to share that information with the participant.

Web address:
https://webmail1.uwindsor.ca/Redirect/web4.uwindsor.ca/units/researchEthicsBoard/studyresultforms.nsf/VisitorView?OpenForm&count=-1

Date when results are available: August 2011

SUBSEQUENT USE OF DATA
This data will be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS
Participants may withdraw their consent at any time and discontinue participation without penalty. If participants have questions regarding their rights as a research subject, they can contact the Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____   _____
      Signature of Investigator   Date

Approval Email From Windsor-Essex Catholic District School Board

----- Original Message -----

Dear Ms. Furlong:
Title of Study: Discovering Your Possibilities from Risk to Resilience

As per our earlier correspondence, Superintendent Mike Seguin has granted approval for the revisions to your research application to include audiotaping.

We have attached your revision description and the approval from the Research Ethics Coordinator at the University of Windsor.

Simone Lira
Executive Assistant
Student Achievement K to 12
Windsor-Essex Catholic District School Board
(519) 253-2481 Ext. 1233

The information in this email is intended solely for the addressee(s)
named, and is confidential. Any other distribution, disclosure or copying
is strictly prohibited. If you have received this communication in error,
please reply by email to the sender and delete or destroy all copies of
this message and any attachments.

SST Script for Student Audio Interviews

"Mrs. Furlong would like to interview two students about their experiences in the Discover Your Possibilities program to investigate whether the program increases resiliency and which parts of the program, if any, contributes to resiliency. The interview will be audio taped.   Mrs. Furlong has asked me to ask the students for consent for the audio taped interview. Here are the consent forms that will need to be signed by your parents/guardians and by you. Participating in the interviews will be completely voluntary. There are no consequences if you choose not to participate in the interview.   If you do decide to do the interview, you can choose not to answer any question and you can stop the interview at any time. Mrs. Furlong will not share the results of your individual interview with any of your teachers or your parents. Do you have any questions?"

 i) Request that the students take the forms home, have their parents sign the forms and return the forms the next day

 j) Inform the students of the date and time of the interview

 k) Please remind them how important it is that they are present at school the day the interview is set up

University of Windsor

PARENT/GUARDIAN CONSENT FOR AUDIO TAPING FOR RESEARCH

Dear Parents/Guardians:

Title of Study: **Discovering Your Possibilities**

Your child is asked to participate in an interview for a research study conducted by Mrs. Kathy Furlong, Dr. Geri Salinitri, Dr. Kara Smith from the Faculty of Education, as well *as* Dr. Victoria Paraschak from the Faculty of Kinesiology at the University of Windsor. The results of this study will be contributed to Mrs. Kathy Furlong's thesis paper. If you have any questions or concerns about the research, please feel to contact Mrs. Kathy Furlong at 519-969-1883 or Dr. Salinitri at 519-253-3000, ext. 3961.

PURPOSE OF THE STUDY
The purpose of this study is to assess whether the Discovering Your Possibilities program increases resiliency skills and academic success for students. Resiliency is the ability to successfully meet life's challenges.

PROCEDURES
If your child volunteers to participate in this aspect of the study, s/he will be asked to:
  1) Participate in a taped interview conducted by Mrs. Kathy Furlong or Dr. Geri Salinitri
  2) Your child will receive the results of the study. Any student who wants to review the individual results of their interview will be given the opportunity to meet with the researcher to review these results.
  3) Access to records must be given for research purposes

POTENTIAL RISKS AND DISCOMFORTS
At any time during the interview, if your child is uncomfortable answering any question, s/he is not required to continue with that question or the interview.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
This study evaluates the Discovering Your Possibilities Program, which should prove to be beneficial to the participants. Students will gain resiliency skills which will help them to improve academic success and in meeting life's challenges. The results obtained from this type of investigation will help us to evaluate the effectiveness of this program on increasing resiliency skills and academic success.

COMPENSATION FOR PARTICIPATION
Participants will not receive payment for participating in this study.

CONFIDENTIALITY
Any information that is obtained in connection with this interview and that can be identified with your child will remain confidential and will be disclosed only with your permission. All information will remain in the researcher's office in a locked cabinet. Only the researchers will have access. As soon as the data has been analyzed and the report completed to the satisfaction of the stakeholders, including the participants, it will be erased and shredded.

PARTICIPATION AND WITHDRAWAL
You can choose whether to have your child participate in this interview or not. If your child volunteers to participate in this interview, s/he may withdraw at any time without consequences of any kind. Your child may also refuse to answer any questions s/he does not want to answer. The investigator may withdraw your child from this research if circumstances arise which warrant doing so. The participant can request to have their data removed from the study at any time.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS
The overall results of the study will be posted in the Research Ethics Board website of the University of Windsor. The participants will have the right to get specific information in connection with their individual interview and the researchers will set up a time to share that with any individual participant that requires having such feedback.

Web address: http://www.uwindsor,ca

Date when results are available: August 2011

SUBSEQUENT USE OF DATA
This data will be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS
You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your child's rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE
I understand the information provided for the study **Discover Your Possibilities** as described herein. My questions have been answered to my satisfaction, and I give consent for my child to the audio-taping of interviews, procedures, or treatment. I understand these are voluntary procedures and that my child is free to withdraw at any time by requesting that the taping be stopped. I also understand that my child's name will not be revealed to anyone and that taping will be kept confidential. Tapes are filed by number only and stored in a locked cabinet.
I understand that confidentiality will be respected and that the audio tape will be for professional use only. I have been given a copy of this form.

_____
    Name of Student

_____
    Name of Parent/Guardian

_____   _____
    Signature of Parent/Guardian   Date

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____   _____
    Signature of Investigator   Date

University
of Windsor

Assent Form for Secondary School Students

I would like to interview you regarding the *Discovering Your Possibilities* program that you participated in this year. The purpose of the interview is to investigate what aspects of the *Discovering Your Possibilities* program developed resiliency, and to discover how to best improve resiliency.

This is a completely voluntary request. You do not have to participate in this interview. Your name will not appear in the interview nor in the research that is generated by the interview. The student success teacher will not have access to the individual answers in your interview. Your student success teacher will only know that I have requested an interview with you.

When I am finished assessing the interviews with all the students who agree to participate in this aspect of my study, I will write a thesis paper on what I have learned. My professors will read it, and it might be published in a book, or in an educational journal, but no one will know who the students are that answered my questions. If you want the individual results of your interview, I will give you that information. I will also give you information on the results of my study.

I want you to know that all your information will be kept confidential. I will not share your individual answers with your teachers or parents or any other students. The only exception to confidentiality is if you tell me that someone has been hurting you. If I think that you are being hurt or abused I will need to tell your parents or someone else who can help you. Otherwise, I promise to keep everything that you tell me confidential.

Your parent(s)/guardian(s) have given their consent for you to participate in the interview. There are no consequences if you choose not to participate in the interview. If you decide to do the interview, you can stop the interview at any time, and you don't have to answer any question during the interview. It's entirely up to you. If you are willing to participate in the interview please sign and return this form to your Student Success Teacher.

I understand what I am being asked to do to be in this study, and I agree to be in this study.

_____   _____
   Signature   Date

_____
   Witness

Teacher Consent Form for Audio Taping of Interviews

CONSENT TO PARTICIPATE AUDIO TAPING FOR RESEARCH

Dear Teacher:

Title of Study: Discover Your Possibilities

You are asked to participate in a research study conducted by Mrs. Kathy Furlong, Dr. Geri Salinitri, Dr. Kara Smith from the Faculty of Education, as well *as* Dr. Victoria Paraschak from the Faculty of Kinesiology at the University of Windsor. The results of this study will be contributed to Mrs. Kathy Furlong's thesis paper. If you have any questions or concerns about the research, please feel to contact Mrs. Kathy Furlong at 519-969-1883 or Dr. Salinitri at 519-253-3000, ext. 3961.

PURPOSE OF THE STUDY
The purpose of this study is to assess whether the Discovering Your Possibilities program increases resiliency skills and academic success for students. Resiliency is the ability to successfully meet life's challenges.

PROCEDURES
If you volunteer to participate in this aspect of the study, you will be asked to:
1) Participate in a taped interview conducted by Mrs. Kathy Furlong or Dr. Geri Salinitri
2) You will receive the results of the study. If you want to review the individual results of your interview you will be given the opportunity to meet with the researcher to review these results.
3) Access to records must be given for research purposes

POTENTIAL RISKS AND DISCOMFORTS
At any time during the study, if you are uncomfortable completing any interview question, you are not required to continue with that question or the interview.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
This study evaluates the Discovering Your Possibilities Program, which should prove to be beneficial to the participants. Students will gain resiliency skills which will help them to improve academic success and in meeting life's challenges. The results obtained from this type of investigation will help us to evaluate the effectiveness of this program on increasing resiliency skills and academic success.

COMPENSATION FOR PARTICIPATION
Participants will not receive payment for participating in this study.

CONFIDENTIALITY
Any information that is obtained in connection with this interview and that can be identified with you will remain confidential and will be disclosed only with your permission. All information will remain in the researcher's office in a locked cabinet. Only the researchers will have access. As soon as the data has been analyzed and the report completed to the satisfaction of the stakeholders, including the participants, it will be erased and shredded.

PARTICIPATION AND WITHDRAWAL
You can choose whether to participate in this interview or not. If you volunteer to participate in this interview, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer. The investigator may withdraw you from this research if circumstances arise which warrant doing so. You can request to have your data removed from the study at any time.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS
The overall results of the study will be posted in the Research Ethics Board website of the University of Windsor. You will have the right to get specific information in connection with your interview and the researchers will set up a time to share that with any individual participant that requires having such feedback.

Web address: http://www.uwindsor,ca

Date when results are available: August 2011

SUBSEQUENT USE OF DATA
This data will be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS
You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE
I understand the information provided for the study **Discover Your Possibilities** as described herein. My questions have been answered to my satisfaction, and I give consent to the audio-taping of interviews, procedures, or treatment. I understand these are voluntary procedures and that I am free to withdraw at any time by requesting that the taping be stopped. I also understand that my name will not be revealed to anyone and that taping will be kept confidential. Tapes are filed by number only and stored in a locked cabinet.
I understand that confidentiality will be respected and that the audio tape will be for professional use only. I have been given a copy of this form.

_____
Name of Participant

_____   _____
Signature of Participant   Date

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____   _____
Signature of Investigator   Date

Appendix G - Interview Questions

DYP Student Interview Questions

Introduction:
One of the goals of the *Discovering Your Possibilities* program was to improve resiliency. Resiliency is the ability to successfully meet life's challenges. I would like to ask you some questions about your experience in the program and how it did or did not assist in improving your level of resiliency.

1. Tell me what you did, what you liked, what you feel could be improved in the program.

2. At the beginning of the program, what was your relationship like with the other students, teachers, police liaison officer and university students?

3. During the program did your relationship with these people change? How did it change? Did it happen over time or was there one specific event/situation that happened that changed your relationship with that person or persons?

4. Describe the challenges that you personally faced while in the program.
   a) How did you deal with them? What skills or abilities did you use to deal with these challenges?
   b) Did you deal with the challenges alone or did others help you? Who helped you and how did they help?
   c) How did it feel to "meet" that or those challenge(s)?
   d) Did meeting challenges in the program help you to meet challenges in other aspects of your life? Can you give one or more examples?

5. Did you take initiative at any time during the program? Can you give one or more examples?

6. Did the program help you to develop skills and abilities to stand up to peer pressure and make your own decisions? How did the program do this? Can you give an example?

7. Is there anything else that you have learned about yourself from participating in this program?

8. Is there anything else you would like to say about your experience in the *Discovering Your Possibilities* program that was not covered in these questions?

Sample Probes
1. Can you give me a specific example of that?
2. Can you tell me more?
3. Can you expand on your answer?
4. Can you explain your answer?

Teacher Interview Questions

Introduction:
One of the goals of the *Discovering Your Possibilities* program was to improve resiliency. Resiliency is the ability to successfully meet life's challenges. I would like to ask you some questions about your experience in the program and how it did or did not assist in improving your students' level of resiliency. The Discovering Your Possibilities program is set up so that students would be challenged physically, emotionally, cognitively and spiritually.

1. Please outline your involvement in the DYP program over the year. Tell me what you did, what you liked, what you feel could be improved.

2. Can you recount how students used creativity and humour to meet challenges while in the program?

3. Did students demonstrate insight during the program? Can you give one or more examples of how students demonstrated insight?

4. Are your students more independent now than at the beginning of the program? Please elaborate.

5. Did your students demonstrate initiative throughout the program? Please give examples.

6. Did students demonstrate an improvement in their values orientation in the program? Please elaborate.

7. How did students' relationships change with:
   a) Themselves
   b) Other students
   c) Police liaison officer
   d) University students
   e) Yourself?

8. Are there any other examples of resiliency that you observed from your students that are different now from when they first started the program that you believe are directly related to what they learned in the program? Please elaborate.

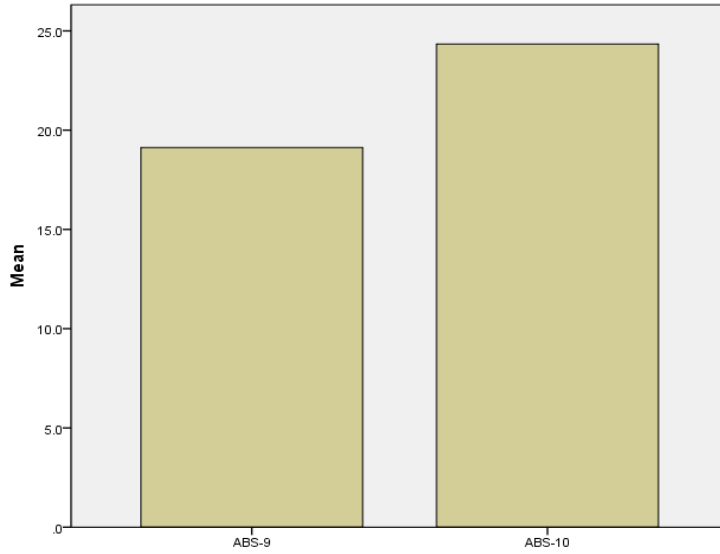9. Is there anything else you'd like to say that wasn't covered in these questions?

Sample Probes
1. Can you give me a specific example of that?
2. Can you tell me more?
3. Can you expand on your answer?
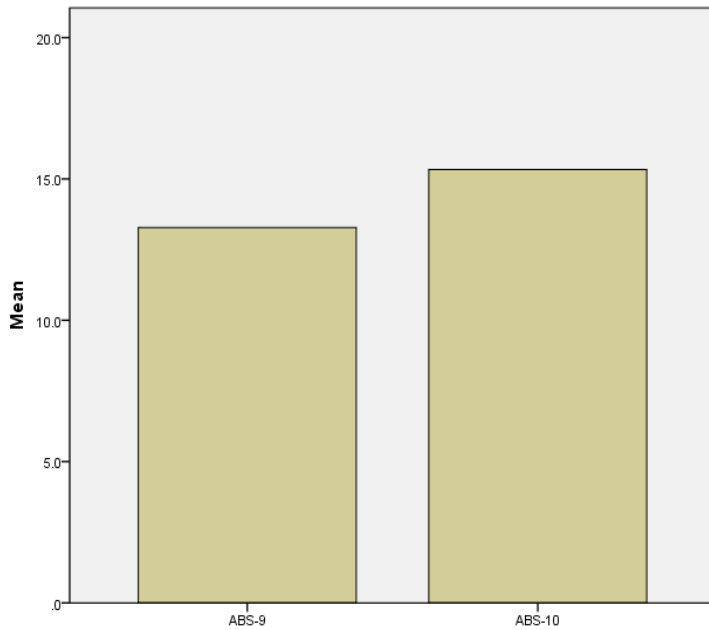4. Can you explain your answer?

Appendix H

Graphs

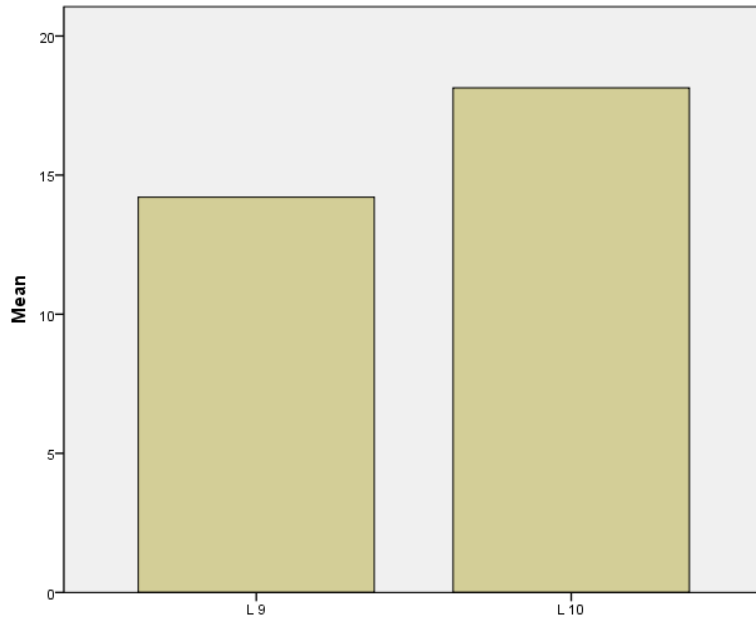**Figure 1 - Attendance- All Study Participants**
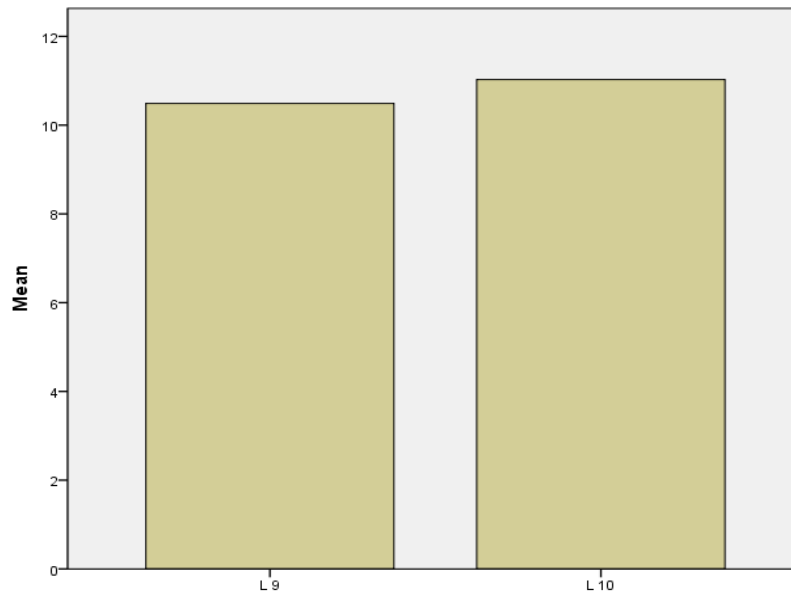

 a *p=.00 <p=.005*

Figure 1.2- Attendance – Middle and Highest Third Attendees in Intervention
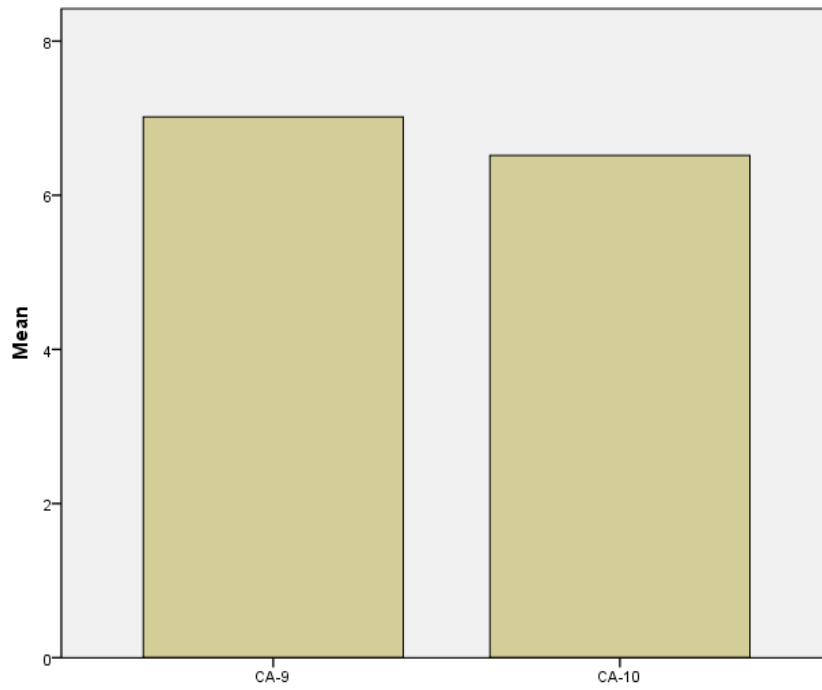

a *p=.01<p=.05*

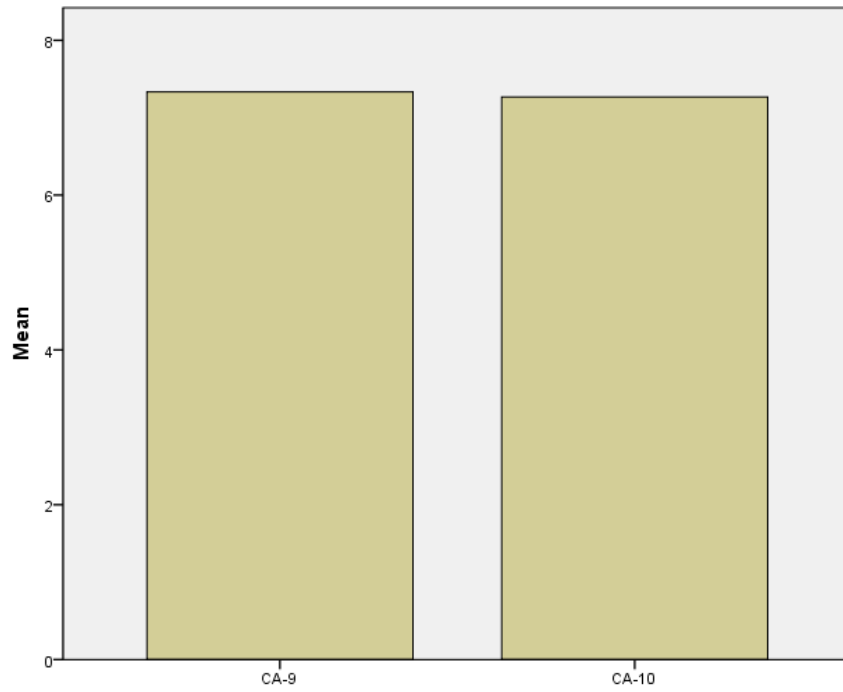**Figure 2 – Number of Times Late for Class - All Study Participants**

^{a} *p=.02<p=.05*

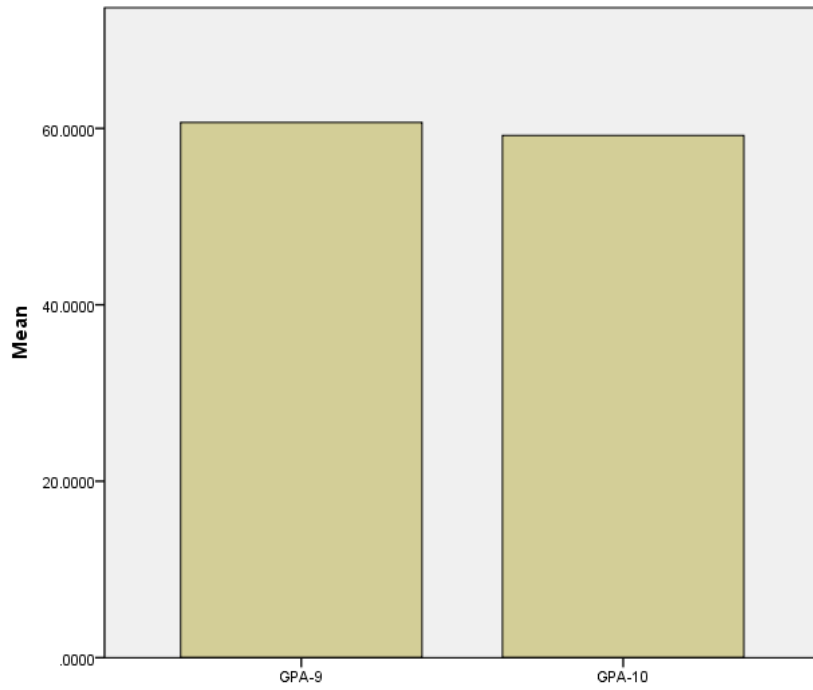**Figure 2.1- Number of Times Late for Class – Middle and Highest Third Attendees in Intervention**

^{a} *p* value=.00<*p*=.05
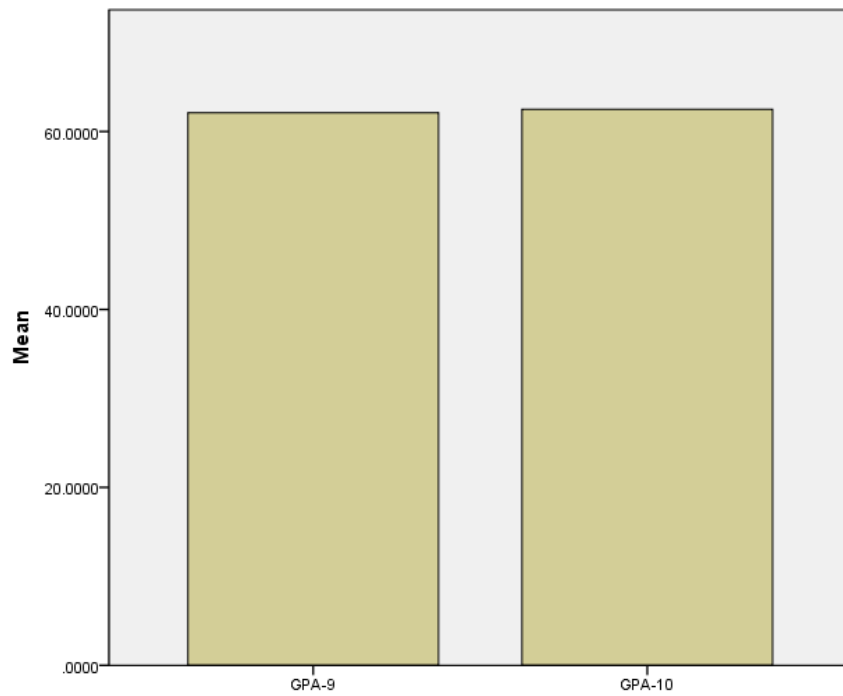
Figure 3- Credit Accumulation – All Study Participants

^a *p*=.04<*p*=.05

Figure 3.1 - Credit Accumulation – Middle and Highest Third Attendees in Intervention

^a *p* value=.02<*p*=.05

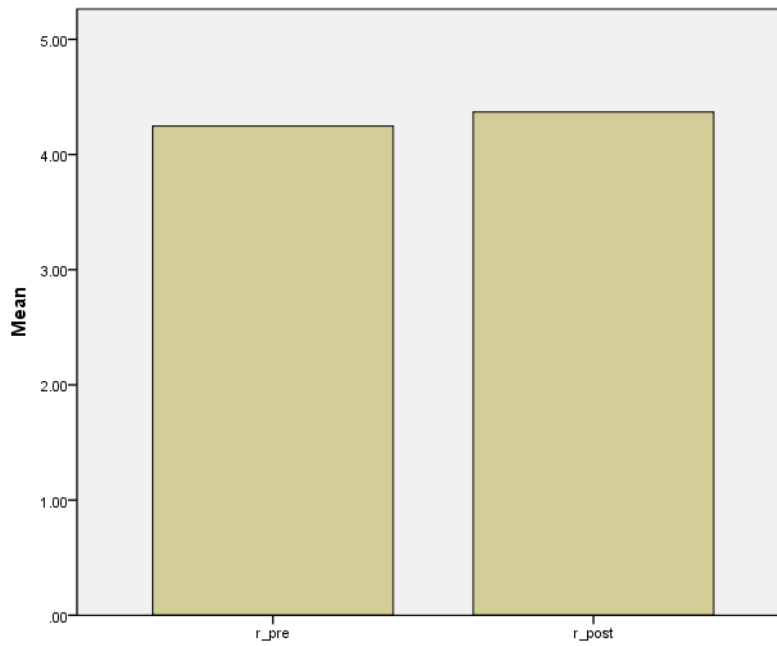**Figure 4 – Grade Point Average – All Study Participants**

[a] $p=.42>p=.05$

Figure 4.1 – Grade Point Average – Middle and Highest Third Attendees in Intervention

[a] $p=.31>p=.05$

Figure 5 – Resiliency – All Study Participants

^a *p=.34>p=.05*

Figure 5.1 – Resiliency – Middle and Highest Third Attendees in Intervention
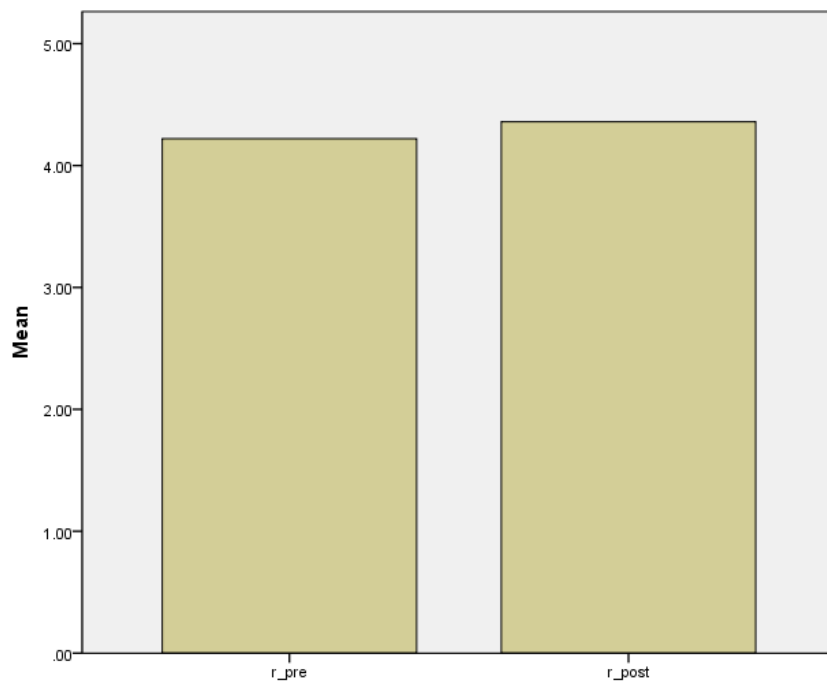
^a p=.95>p=.05

Figures 1 to 4.1 verify that the more students attended the intervention, the more

improvement occurred in academic success as measured by student engagement measures of attendance, number of times late for class, and credit accumulation.

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