

LEBANESE AMERICAN UNIVERSITY

The Relationship between Academic Self-Concept and the
Academic Motivation of Lebanese Learning Disabled Students

Garin Terzian

A thesis

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts in Education

School of Arts and Sciences

August 2015



Lebanese American University
School of Arts and Sciences - Beirut Campus

Thesis Approval Form

Student Name: Garin Terzian

I.D. #: 201104105

Project Title: The Relationship Between Academic Self-Concept and Academic
Motivation of Lebanese Learning Disabled students

Program / Department: Master of Arts in Education

School: Arts and Sciences

Approved by:

Project Advisor: Dr. Ahmad Oueini

Committee Member: Dr. Garene Kaloustian

Committee Member: Dr. Mahmoud Natout

Date

Aug 31, 2015



THESIS COPYRIGHT RELEASE FORM

LEBANESE AMERICAN UNIVERSITY NON-EXCLUSIVE DISTRIBUTION LICENSE

By signing and submitting this license, you (the author(s) or copyright owner) grants to Lebanese American University (LAU) the non-exclusive right to reproduce, translate (as defined below), and/or distribute your submission (including the abstract) worldwide in print and electronic format and in any medium, including but not limited to audio or video. You agree that LAU may, without changing the content, translate the submission to any medium or format for the purpose of preservation. You also agree that LAU may keep more than one copy of this submission for purposes of security, backup and preservation. You represent that the submission is your original work, and that you have the right to grant the rights contained in this license. You also represent that your submission does not, to the best of your knowledge, infringe upon anyone's copyright. If the submission contains material for which you do not hold copyright, you represent that you have obtained the unrestricted permission of the copyright owner to grant LAU the rights required by this license, and that such third-party owned material is clearly identified and acknowledged within the text or content of the submission. IF THE SUBMISSION IS BASED UPON WORK THAT HAS BEEN SPONSORED OR SUPPORTED BY AN AGENCY OR ORGANIZATION OTHER THAN LAU, YOU REPRESENT THAT YOU HAVE FULFILLED ANY RIGHT OF REVIEW OR OTHER OBLIGATIONS REQUIRED BY SUCH CONTRACT OR AGREEMENT. LAU will clearly identify your name(s) as the author(s) or owner(s) of the submission, and will not make any alteration, other than as allowed by this license, to your submission.

Name: *Garin Terzian*

Signature: 

Date: *31/08/2015*

PLAGIARISM POLICY COMPLIANCE STATEMENT

I certify that:

- I have read and understood LAU's Plagiarism Policy.
- I understand that failure to comply with this Policy can lead to academic and disciplinary actions against me.
- This work is substantially my own, and to the extent that any part of this work is not my own I have indicated that by acknowledging its sources.

Name: *Garin Terzian*

Signature: 

Date: *31/08/2015*

Dedication Page

To my Dad

ACKNOWLEDGMENT

This research would not have been possible without the help and assistance of many persons.

First, I would like to acknowledge the support, guidance, and encouragement received by my supervisor Dr. Ahmad Oueini.

I would also like to thank the committee members, Dr. Garene Kaloustian and Dr. Mahmoud Natout for their time and patience.

To my mother Silva Terzian, for your prayers.

A special thank you goes to my husband Hovig Demirjian; your unconditional love was my ultimate motivation to finish my Master's degree.

The Relationship between Academic Self-Concept and the Academic Motivation of
Lebanese Learning Disabled Students

Garin Terzian

ABSTRACT

It is hypothesized that academic self-concept of Lebanese students with learning disabilities (LD) is lower than academic self-concept of non-learning disabled (NLD) students, and that there is a positive correlation between academic self-concept and academic motivation. Moreover, academic self-concept of Lebanese students with LD who are in inclusive settings is lower than academic self-concept of students with LD who are in pulled-out from the regular classroom and places into the resource room. To test these hypotheses, a group of learning disabled (N=56) and non-learning disabled students (N=56) (Total N =112) completed self-concept and motivation questionnaires. Results showed significant difference between the academic self-concept of Lebanese LD students and NLD students, and a significant positive correlation between academic self-concept and academic motivation of students with LD. As for the difference between the academic self-concept between LD students in the inclusive vs. pull-out settings, results failed to support the hypothesis. The implications of the study are discussed in the light of the existing educational and psychological theories, and recommendations are made to special educators and regular classroom teachers to help improve LD student's self-concept.

Keywords: Academic self-concept, Academic motivation, Learning disabled students.

TABLE OF CONTENTS

	PAGE
Chapter	
I- Introduction	1
1.1 Overview.....	1
1.2 Significance of the study	3
1.3 Purpose of the stud.....	4
1.4 Stated Hypotheses	4
1.5 Operational definition	5
1.6 Ethics	5
1.7 Methodology	6
1.8 Conclusions	7
II- Literature Review.....	9
2.1 Academic self-concept	9
2.2 Academic motivation	18
III- Methodology	23
3.1 Sample	23
3.2 Procedure	24
3.3 Instruments	24
3.4 Data analysis	25
IV-Results	27
V-Discussion	30
5.1 Conclusions	42
5.2 Limitations	42
5.3 Recommendation	43
Reference	45-55
Appendix 1	56
Appendix 2.....	58

List of Tables

Table 1: Independent sample test for mean differences between learning disabled student and Non- disabled students.....	25
Table 2: Descriptive Statistics for the Study Variables.....	25
Table 3: Independent sample test for mean differences between Inclusion and pull-out students.....	26

Chapter One

Introduction

1.1 Overview

The psychological functioning of students with learning disabilities (LD) has been studied extensively in the literature, especially their cognitive abilities and academic self-concept. For example, self-concept of the students with LD is assumed to be negative compared to that of regular classroom students (Zelege, 2004). Initially, self-concept was considered a general and global construct that didn't have any specific subscales or dimensionality (Dyson, 2003). Later, with the pioneering work of Marsh (2004), self-concept started to be conceived as a multilayered construct with different dimensions (Trautwein, Ludtke, Koller, & Baumert, 2006). More recently, self-concept as a critical psychological cognition has been divided into different components including global, academic, social and physical (March & O'Mara, 2008). Literature has clearly shown that academic self-concept of students with LD is lower compared to their peers. For example, Gans, Kenny and Ghany (2003), in a study of mostly Hispanic middle-school students, found that LD students had lower self-concepts in academic and behavior areas compared to non-LD students. One of the major theorists who have examined the connection between learning and self-concept is Bandura. In 1977 he explained that students firstly learn from their past academic achievements and failures and set goals based on their past experiences. Based on these experiences, students avoid tasks that will exceed their ability and set goals to those tasks that have been previously mastered since they judge themselves as capable learners. Secondly, students set their personal goals and

the achievement of these goals become standard for success and consequently for feeling of competency. After achieving these goals, individuals develop a sense of satisfaction. Hence, an individual's motivation for action and learning hinges on the need for achievement and feeling of competency or self-efficacy (Tsang, Hui & Law, 2012). In sum, motivation for learning is determined by the extent to which students assume they can achieve certain goals and eventually feel self-satisfaction, which results from goal achievement.

The way students perceive themselves in the school or within their social and academic environment influences their motivation in different ways. Although many studies have tapped the self-concept of LD students, the literature has not addressed the relation between academic self-concept and academic motivation of the LD students, especially in a non-western context such as Lebanon. Presumably, LD students feel less competent compared to their counterparts (Gans et al., 2003). On the other hand, the placement of LD students whether in inclusive setting or pull-out will impact their academic self-concept (Wiener & Tardif, 2004).

As a special needs teacher, my personal observations have shown that Lebanese students who are more aware of their disability (a factor influencing their self-concept) are more sensitive to their non-disabled (regular classroom) peers and social environment, which in turn will probably affect their academic motivation for example, students show less engagement in the class, less participation in the school activities, shyness...etc. These observations have been often verified by the students' behavior in and outside classroom where they become vigilant on the way others respond and engage in social activities with them. Similarly, for example, a study conducted by Tabassam and Grainger (2002) claims that students with LD score low on academic self-concept. Furthermore, additional studies have observed that the

academic self-concept of the students is influenced by prior achievement and in turn academic self-concept is a predictor of consequent achievement in school (Marsh, Trautwein, Ludtke, Koller & Baumert, 2005).

In Lebanon, only recently, I have observed that, LD students started being supported in the schools and not being labeled as unmotivated like teachers used to do previously. Nowadays, teachers are aware of the fact that students might have some academic difficulties, which will not be any obstacle to progress in their academic aspects if they received the appropriate support. Many studies have been done about self-concept and academic motivation of students. However, there is a lack of general understanding of the influence of self-concept on the learning experience of the students. Most probably, teachers who haven't developed extensive teaching contact with students with academic difficulties fail to develop teaching and pedagogical practices that consider the criticality of students' self-concept.

As a result, the following thesis will investigate the relationship of academic self-concept of LD students and their academic motivation. It will also examine the impact of the placement of the LD students on their academic self-concept.

1.2 Significance of the Study

The following study is expected to provide significant insight into the relation between self-concept and academic motivation in Lebanese schools. The justification of these assumptions lies in the fact that there is discrepancy of LD student's academic achievement and NLD students; therefore, there is the probability of LD students to feel less competent compared to their Non-LD counterparts. On the other hand, the placement of LD students whether in inclusion setting or pull-out setups will impact their academic self-concept. Also, as a special needs teacher, my

personal observations have noted that students who are more aware of their disability are more sensitive to their peers and social environment, which in turn will probably affect their academic motivation.

1.3 Purpose of the study

The purpose of the following quantitative study is to investigate the influence of the academic self-concept on the learning process of the LD students who attend Lebanese private schools. The findings of this study will help classroom teachers better understand LD students' needs and help them to be more engaged in the classroom. Moreover, the study aims at providing evidence based results and suggestions to teachers who instruct LD students and often fail to notice and even underestimate the impact of self-concept on the learning motivation of the students. The results will also help teachers understand how the placement of the LD students impact on their academic self-concept and find ways to encourage and motivate the students in different settings.

1.4 Stated Hypotheses

The following study proposed three hypotheses that are novel to the field of educational psychology especially in Lebanon, a collectivistic country that clearly lacks a complete understanding with regard to LD students' academic self-concept. The hypotheses that will be tested are the following:

1. The academic self-concept of Lebanese students with Learning Disabilities (LD) is lower than the academic self-concept of non-Learning Disabled (NLD) students.
2. There is a positive correlation between academic motivation of Lebanese LD students and academic self-concept.

3. Academic self-concept of Lebanese students with LD who are in inclusive settings is lower than academic self-concept of students with LD who are pulled-out from the regular classrooms.

1.5 Operational Definitions

Learning Disability (LD) is referred to as “those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think speak, read, write, spell or to do mathematical calculations”(Vaughn, Bos & Schumm, 1997).

Academic self-concept is defined as the learner’s beliefs about his or her academic abilities as a student in comparison with other students (Marsh, 2002).

Academic motivation is conceptualized as a student’s desire to achieve in different academic subjects in addition to their competence and judgment against a standard of performance or excellence (Wigfield & Eccles, 2002).

Inclusion in general education classroom is considered for students with special needs who spend most or all of their time with non-LD (NLD) students.

Pull-out from the general education classrooms, in turn, is for those students who spend their time with other students who have similar disabilities in the resource or specially designed classrooms.

1.6 Ethics

Similar to scientific investigations, the following paper followed the proper ethical consideration before and after collecting the data. Prior to visiting schools,

IRB approval was obtained from Lebanese American University. A consent form was sent to the school administrations to take permission to collect data in their schools. Also, a consent form was sent to the parents of the students who participated describing the objective of the study and the procedure. A consent form was obtained from the participants after the author read and explained to the students the objective of the research. They were also informed about the confidentiality and anonymity of their responses. Participants were also reminded that their participation is on a voluntary basis and they may withdraw at any point without consequences.

1.7 Methodology

Participants

Students were recruited from 5 Lebanese schools that are located in the suburbs of the capital Beirut that have, as part of their curriculum, a special education or learning support department. The recruitment was done through convenience sampling given the availability of schools with special educational needs department. Both male and female LD student between the ages 10 to 16 years of age participated in this study. The study included only those students who had been referred to and assessed by the educational psychologist and diagnosed as learning disabled students. The special education students were from both general education classrooms (inclusion) and those who are typically pulled-out from general education classrooms.

Instruments

The Academic Self-Concept Questionnaire (ASCQ): In order to measure academic self-concept of LD students and NLD, Academic Self-Concept

Questionnaire was used. The tool was developed by Liu & Wang (2005); it consists of 20 questions that address the academic self-concept of the students, for example “I am interested in my school work” and “I study hard for my tests”. The questions are based on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (strongly Agree).

Academic Motivation Scale in Middle School and High School: In order to measure the academic motivation of LD students and NLD students, Academic Motivation Scale in Middle School and High school was used which address the academic motivation of the students. The tool consists of 6 questions based on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (strongly Agree), for example: “I have a positive attitude toward school”, “I have enjoyed my school experience so far.” (Anderson-Butcher, Amorose, Iachini, & Ball, 2013).

Data Analysis

For the first hypothesis, in order to compare between LD and NLD students, a t- test was conducted. For the second hypothesis, the correlation between academic self-concept and academic motivation of LD students was analysed using simple Pearson correlation. As for the third hypothesis, t-score was conducted to compare the results of academic self-concept of LD students in inclusion settings with the LD students who are pulled out into the resource rooms.

1.8 Conclusion

Chapter one of the thesis provides a general background of the research with the respective theoretical explanation of the anticipated results. It also introduced the purpose of the study and the instruments that will be used for data collection. In

chapter two, the study provides an in-depth review of the literature on student's self-concept by specifically focusing on learning disabled students. In addition, the chapter will cover the appropriate motivational theories that explain student's learning behavior in the classrooms. Chapter three discusses in detail the participants and instruments to measure academic self-concept and academic motivation that were used to test the hypotheses. Chapter four includes the results of the study and finally chapter five includes the discussion, limitations and future recommendations.

Chapter two

Literature Review

The following chapter reviews the literature on academic self-concept of students with or without learning disabilities followed by academic motivation of students with LD. The purpose of this chapter is to outline existing research about academic self-concept and academic motivation of students with and without learning disabilities (LD). Also the following chapter looks into the major studies in the literature of education research that highlights the importance of academic self-concept and the way it influences the motivation of students with special educational needs.

2.1 Academic self-concept

In the first section of the literature review, the author reviews the major studies that have investigated the general and academic self-concept of learners. Whenever possible, direct links are established between the academic self-concept and the motivation of the students with special educational needs.

Historically, different theories have conceptualized self-concept and related it to different educational concepts. First self-concept was considered a general and global construct that didn't have any specific subscales or multi-dimensionality (Parker, 1966). Later with the pioneering work of Marsh, self-concept was conceived as multilayer construct with different dimensions (Lewis & Knight, 2000). Currently, self-concept as a critical psychological cognition has been divided into global, academic, social and physical components, although for the purpose of

the following study, the major focus will be on the academic self-concept of the students due to its interaction with and influence on different educational concepts, including achievement, motivation and learning behavior.

With respect to students with Learning Disabilities (LD), this population has received special attention both in academic and school settings and research. Their psychological functioning has been a topic of interest to most teachers, educators, psychologist and researchers (Tabassam et al., 2002). In line with this, the literature has clearly shown that LD students have different psychological and emotional functioning in contrast to those students without special needs or difficulties (Skiba et al, 2008). One of the psychological constructs that have often characterized individuals in general is self-concept. Similar to students with no special needs or difficulties, self-concept is comprised of the academic, social, emotional and physical self-beliefs of children and the way they evaluate these different dimensions (Lewis & Knight, 2000; Mui, Yeung, Low & Jin, 2000).

In general, academic self-concept pertains to the way students feel about themselves as learners (Guay, Marsh & Boivin, 2003). It constitutes the vantage point from which individuals evaluate their sense of wellbeing. However, according to some theorists, basing individual perceptions exclusively on a general global self-concept appears a naïve oversimplification because humans experience and react to a complex social environment. For example, Marsh & Shavelson (1985) conceived of self-concept as a construct with different hierarchal and multifaceted dimensions. Based on their findings, self-concept is conceptualized and structured into social, physical, emotional and academic components. More specifically, students' academic self-concept represents the self-belief of the individual's academic abilities

and perceptions towards learning (Nagy, Trautwein, Ledtke, Koller & Baumert, 2006). This psychological notion of self-concept has been perceived and defined differently by different theorists. According to Lent (1997), academic self-concept is explained as the “specific attitudes, feelings, and perceptions about one’s intellectual or academic skills, representing a person’s self- beliefs and self-feelings regarding the academic setting” (p. 308). Similarly, Cokley (2000) conceptualized academic self-concept as a learner’s view of the academic ability in comparison with other students. With regard to its predictive value, self-concept, similar to self-efficacy, is considered as one of the most salient constructs that influences student achievement and learning behaviour (Marsh & Craven, 2002). For example, based on findings by McGee and William (2000), self-concept was not only related to students’ learning activities, but it also predicted economic success, long-term health and wellbeing. In addition, it is believed that self-concept contributes to the development of the wish to have positive evaluations about oneself, which in turn impacts the individual’s choice, planning, persistence, and subsequent accomplishments (Marsh, Craven, & McInerney, 2008)

In schools and other educational settings, educators promote the development of positive self-concept due to its association with academic achievement and better performance. For example, in a longitudinal investigation on transitory classes from middle to high school, Silverthorn, DuBois and Crombie (2005) found that students with higher self-concept demonstrated substantially higher achievement in English language, math and sciences as compared to students with lower self-concept. The association between academic self-concept and achievement has been explained by the fact that children with increased self-concept exhibit motivation to learn and in turn this motivation results in positive academic outcome (Dweck, 1986). In a similar

vein, Dweck argues that the confidence of children “in their current ability must be high and must remain high if they are to choose appropriately challenging tasks and pursue them in effective ways. Yet the same focus on ability makes their confidence in their ability fragile even the mere exertion of effort calls ability into question” (p. 1043). In other words, prior to having the necessary skills or knowledge to pursue academic challenges, students, regardless of their ability, have to have developed positive self-concept about themselves as capable individuals and learners.

Moreover, academic self-concept represents an important control belief in the school context and is expressed as memory structure and representation of the abilities and competencies a person has. It has been shown to be positively associated with positive emotions and negatively with negative emotions. For example, students with low academic self-concept are less likely to choose difficult academic coursework, engage in challenging educational opportunities, and apply for highly selective programs (Nagy et al., 2006). Furthermore, research findings have shown that academic self-concept is positively related to the student’s academic achievement and motivation (Areepattamani, 2012) and learning-disabled (LD) students consistently scored lower on academic self-concept than students without disabilities (Erlbaum & Vaughn, 2001). Conceptually and theoretically, self-concept is believed to be a by product of individual’s social interaction and continuous social comparison (O’Mara, Marsh, Craven, & Debus, 2006). Investigations into the possible predictors of student’s academic achievement have concluded that specific self-concept that tap into student’s academic self-belief is a stronger predictor compared to student’s general self-concept (Marsh & Craven, 2002; Seaton, Marsh, & Craven, 2010). Students with LD have been encouraged to be included in regular schools rather than specialized schools due to the fact that mingling with NLD

students will help them improve their social and academic skills (Salend & Duhaney, 1999). By the inclusion of students with LD into regular schools, certain observations have been made specifically those related to academic achievement and academic self-concept. However, while this has been shown to be the case, literature has shown the negative implications of having LD students with NLD. The underlying psychological explanation for this underperformance has been attributed to various factors. In one study, students with learning disabilities not only showed academic underperformance but also lower level of effort investment, academic self-efficacy, positive mood and hope (Lackaye & Margalit, 2006). Accordingly, students with LD have developed low academic self-efficacy, level of positivity, mood and hope and meanwhile all these psychological characteristics can be attributed to academic underperformance itself. Hence, LD students' underachievement becomes a triggering factor that leads to the development of low self-efficacy, positivity, hope and mood. In a similar study, students sampled from kindergarten to grade 12 and experiencing emotional and behavioural disorders, showed achievement deficits across the taught areas and subjects compared to students without emotional and behavioural disturbances (Nelson, Benner, Lane & Smith, 2004). Such findings are not peculiar to school students with learning disabilities; similar conclusions were drawn from studies on college students who had certain learning disabilities. Cosden and McNamara (1997) found that college LD students showed significantly lower test scores, perceptions of cognitive and scholastic abilities when compared to students without learning disabilities. In short, empirical studies have unveiled the fact that LD students in general, whether at school age or in college, underperform compared to NLD students.

In addition, when measured on academic self-concept, students with special needs have been shown to display low academic self-concept than students without disabilities (Zelege et al., 2004). As a result, due to their unique psychological makeup, social circumstances and academic and educational needs, these students have typically been placed in different settings including special schools that cater to their needs. More recently, with the advent of the inclusion movement, these students are mainstreamed into regular classrooms with regular pupils; therefore, students are more prone to compare themselves with their peers. Similarly, researchers have concentrated on the consequences of placing students with needs in special or regular classes. For example, recent research findings have shown that, in general, there is no association between general self-concept of students with special needs and their placement (Elbaum, 2002). In contrast, a number of dissenting studies on the self-concept of children with learning disabilities and those receiving support in regular classes have reported that LD children have a lower academic self-concept than their peers without disabilities (Cambra, 2002). For example, Marsh (2004) claimed that students who are grouped with higher ability peers perceive themselves as less capable academically because they compare themselves with their classmates.

Academic discussions continue to look into the effect of special classes vs. regular classes on the students' self-concept. Studies on the effect of LD students' placement on their academic self-concept have yielded inconclusive findings. As a result, there have been concerns whether students with LD should be placed in regular or special education classrooms. Prior to the inclusion movement, students with special education needs including students with learning difficulty were placed in special schools specifically designed for their needs and challenges. Special schools catered to their educational and sometimes physical needs but also it was

conceived that students who attend such schools would receive closer attention in addition to the services of special needs teachers. For example, Gurney investigated the self-worth of special needs students and reported that segregating special students from the mainstream regular schools would enhance their self-esteem (Humphrey, 2004). The enhancement of self-esteem is attributed to different factors, including teachers' special attention and resources that meet their needs; however, most importantly special educational needs teachers find themselves surrounded with students who have similar difficulties and needs and hence social and academic comparison is contrasted with LD students rather than high achieving regular students. Based on personal judgment, social comparison or social self-concept rather than attention and special resources help LD students to develop higher self-esteem. The placement of LD students in either inclusive or special schools is linked to the self-perception of children. Having in mind the influence of the environment on student's self-concept, a special category of LD students has been investigated, namely dyslexia with special attention drawn to their placement in the school.

As mentioned previously, self-concept of students with learning difficulties significantly varies both with LD students and within subgroups of students with learning and behavioural disabilities. One of the most extensively studied subgroups of LD students in special education is dyslexics or students with a reading disorder. Investigating the self-concept of dyslexic students has received noticeable attention in the literature. For example, in a study to investigate the self-concept between dyslexic students in mainstream placement and special LD unit placement, Humphrey et al (2004) found that dyslexic students in special LD units had a higher self-concept compared to the mainstream groups. The author concluded that the contrast was strongly mediated by the placement and service provision of the

dyslexic population when children “find themselves in specialist units [as] more humanistic, their teachers are better trained and equipped, they receive more attention and support, and their comparison groups are more realistic as one child stated, ‘I don’t feel different in the unit’” (Humphrey & Mullins, 2002, p.199). Whilst the study found that dyslexic students’ self-concept placed in specialized unit as higher than that of mainstreamed students, it didn’t investigate the academic self-concept of these students especially having in mind that academic self-concept is a better predictor of achievement. Arguably, the conclusion set by Humphrey et al (2004) is considered a counterargument to inclusion policy and practice where it is believed that mainstreaming special students in regular classrooms ameliorates their self-concept (Knight, 1999; Westwood & Graham, 2003). By questioning the effects of placement of LD students in certain environments, some attempts have been made to investigate the direct association of placement and services on one hand and self-concept on the other.

Furthermore, in a meta-analysis aimed to study this relation, Elbaum (2002) explored the literature to determine the nature of the association between placement and different domains of self-concept. After reviewing 38 studies, the author found no overall correlation between the two variables even after compartmentalizing the self-concept into global, academic, social and physical. Contrary to Humphrey et al’s (2002) review, LD students who were placed in regular classrooms or attended part-full time special classroom unit didn’t show overall significant differences on psychological self-concept. Hence, Elbaum’s study shed light on the argument of LD student’s placement and its possible consequences on their global and academic self-concept.

On the other hand, the disassociation between placement and self-concept doesn't necessarily imply that LD students are not influenced by their educational environment. Rather, it means that individual differences of LD students possibly explain the way they perceive their classrooms whether inclusive, less restrictive, special units or specialized resource rooms. Hence, developing global self-concept with its different façades becomes a process that is also influenced by individual differences among LD students.

Research claims that the least restrictive environment is associated with more positive social outcomes for students with disabilities (Elbaum et al., 2002). The association between including LD students in general class and their psychological wellbeing translated through academic and social self-concept has not always been smooth or well established. The same results were not produced with other research studies where the authors concluded that special classrooms for these students were more helpful both academically and socially. For example, in one study the participating students expressed that they prefer to work and study in the resource rooms because the academic work was perceived as less stressful (Blackford, 2010). On the other hand, inclusion settings do have their benefits for students with LD where self-esteem and self-worth feelings are believed to increase because students with disabilities are less likely to be labelled by their peers (Klingner, Vaughn, Schumm, Cohen & Forgan, 1998).

Finally, comparative studies have also been carried out to investigate the difference between students with and without needs on self-concept measures. For example, studies comparing academic self-concept among students with and without learning disabilities in regular classroom revealed that those with learning disabilities had a lower academic self-concept compared to their peers (Elbaum et al., 2002).

Most of the studies that included a measure of academic self-concept showed that students with LD had lower academic self-concept than NLD students (Pijla, Skaalvikb & Skaalvikb, 2010).

2.2 Academic Motivation

Motivation is considered to be an important factor that impacts the academic success of the students with or without disabilities (Schunk, 2005). It is known as a complex psychological and behavioural phenomenon that encompasses different factors which influences student learning and social experiences (Pelletier, 2006, p. 569). Conceptually, motivation is defined as the student's condition that activates, guides and maintains their learning behaviour (Kostecky & Hoskinson, 2001).

The relation between self-concept and academic motivation is present in different motivational theories. One of the most influential theories is the social-cognitive expectancy value model of achievement motivation that was fathered by Wigfield et al. (2002). The authors hypothesized that students' task-specific self-concept and their perception of task difficulty predicts their learning behaviour, which in turn explains their academic achievement motivation. Moreover, the researchers believe that the evaluation of a task according to the level of its difficulty and their self-belief (self-concept) directly influences the motivation and achievement of the students. For example, if a student with special needs holds beliefs that he or she is competent in solving mathematical questions and similarly mathematical tasks and questions are rather easy, then most probably the student will develop high expectations for the mathematics as a subject and be motivated to achieve. On the other hand, if an LD student has a belief of incompetency in math and similarly finds math questions challenging, this feeling of low academic self-

concept accompanied with a judgment on the level of the difficulty of the learning experience will lower his or her motivation and as a result the achievement level.

Regarding the motivation of learning disabled students, in general, students with learning disabilities are less academically motivated than NLD students (Mastropieri & Scruggs, 1994; Smith, 1994). Some studies have noted that one of the requirements for enhancing student's self-motivation is the understanding of children's social and cognitive development in order to address and engage them in a level of language that is perceived meaningful and engaging (Comer, 2004). For example, students with LD are significantly different from their peers in their achievement motivation, feeling of helplessness, goal commitment, metacognition, and self-regulation (Sideridis, 2006). Another reason might be that given different explanations for student motivation, some studies have concluded that the lack of competence and negative self-beliefs explain students' lack of motivation and engagement (Margolis and McCabe, 2006). Similarly, previous failing experiences directly correlate with the students' future academic learning tasks and the value they attach to the learning process (Brewster & Fager, 2000).

With regard to explaining the negative self-belief of LD students and their feeling of academic incompetence, some argue that LD students attribute academic success and achievement to external factors, and consequently perceive having little control over their academic learning behaviour and outcome. In other words, LD students develop a sense of learned helplessness due to attribution of learning to external rather than internal controllable factors and beliefs. On the other hand, students who attach personal and internal factors to their learning outcomes exert more control over the learning process and display higher academic achievement. Taking responsibility of the learning process explain the positive outcome that is a

result of believing in internal and personal attributes rather than external uncontrollable factors (Hallahan & Kauffman, 2003). Furthermore, in multiple investigations, Sideridis (2003) found that students with LD noticeably gave up easily on difficult tasks, perceived tasks as threatening and experienced negative emotions before and after their academic tasks. Hence, students who fail to master certain academic skills usually related it to internal and personal causes, such as lack of ability, whereas they associate any success to external causes such as the easiness of tasks or exams (Sideridis, 2003; 2005). Similarly, students with certain learning difficulties have shown a preferential outlook toward school and classroom learning due to their positive attachment to the school. According to one study, LD students displayed a more positive attitude toward school rather than towards their academic tasks. Possibly, due to lack of academic competence and self-belief, students get disengaged from the learning process but not necessarily from the school as a social institution (Grolnick & Ryan, 1990). Furthermore, LD students develop and enhance their self-belief from different non-academic activities since their self-evaluation against their learning will yield negative feedback and lowered self-perception (Wick, 1990).

Both general education and special education teachers experience lack of motivation in their classrooms. For example, Schultz (2003) has observed that one of the primary reasons for teachers' frustration is the lack of student motivation during the learning process. Teachers have outlined the major signs of students' motivational challenges and disengagement through their lack of effort in their homework and assignment in addition to insufficient classroom participation. For example, classroom environments and teachers instructional strategies that focus on student's ability belief translated through scaffolding and providing sufficient skills and time

will help students feel further engaged with the learning task and enhance their internal motivation (Levine, 2003). In a similar vein, a longitudinal study by Huetinck & Munshin (2008) concluded that motivating students is directly related to the way they get engaged into the learning and activities that encourage discovery and enthusiasm. Similarly, enthusiastic teachers are more likely to engage students and thus increase their motivation.

According to a major study undertaken by the National Association of Special Education Teachers that targeted LD students uncovered major factors that directly influenced students motivation that concluded that primarily LD students learn motivation from actually motivated students and enhance their motivation in turn. Secondly, LD students were more likely to prefer to be included in classes that give them enthusiasm and that implement interesting learning and teaching approaches. Similarly, LD students expressed emotional attachment and found inspiration in and motivation towards teachers who were more likely to engage them in the learning process (Boon, Burke, Fore & Spence, 2006). Moreover, according to different study findings, teachers who were characterized with a sense of humour, enthusiasm, and creativity, in addition to setting high learning expectations were more likely to motivate and engage students in the learning process (Malikow, 2005). For example, students who experience joy and pride and become hopeful about their success are motivated to enhance their learning and as a consequence have higher academic achievement (Pekrun, Elliot & Maier, 2009). Negative emotions, in turn, result in negative academic achievement due to its negative influence on students learning experience. On the other hand, studying the motivation of regular students versus pulled out students is necessary to understand the stimuli and their psychological desire in learning and achieving. Several studies have claimed the

importance of motivation in the academic behaviour and achievement of students with learning disabilities (Sideridis, Morgan, Botsas, Padelidu, & Fuchs, 2006; Wiest, Wang, Cervantes, Craik, & Kreil, 2001).

In summary, many studies investigated self-concept in general and academic self-concept in specific and concluded that self-concept has strong influence on the academic motivation of NLD students. It has also implications for the student learning achievement. However, the literature does not include sufficient research studies that have been conducted to examine the relation between academic self-concept and academic motivation of the LD students and whether the placements of the students impact their academic self-concept and academic motivation. Moreover, the literature clearly lacks a body of research in the Lebanese context on LD students' academic self-concept and motivation. Although previous studies have discussed the influence of students' placement on their academic self-concept, no major conclusions have been drawn in terms of the direct impact of student's placement in different learning environments and its relation to their academic self-concept and motivation.

Chapter Three

Methodology

3.1 Sample

Participants for the current study included students from private Lebanese schools located in Beirut and the Greater Beirut area; the sample included both male and female LD and NLD students between the ages of 10 and 16. 17 male and 11 female LD students participated in this research who were in inclusion settings, whereas, 13 male and 15 female LD students were in pull out sessions. As for the NLD students, 30 female and 26 male students participated. The mean age of the LD students in the inclusion settings was 13.17, and for pull-out sessions 13.42. As for NLD students, the mean was 13.25. The total number of the participants was $N=112$, 60 males and 52 females. The LD students had been referred to and assessed by the educational psychologist and diagnosed as learning disabled. The special education students came from both general education classrooms (inclusion) and those pulled-out from general education classrooms. Moreover, the participants were recruited from 4 Lebanese schools that have, as part of their curriculum, a special education or learning support department. In order to have equal sample size, the author attempted to include students equally from regular classrooms and students who attend special resource classrooms within the school. The recruitment was carried out through convenience sampling given the availability of schools with special educational needs departments. The participating students had been enrolled in the specified education program for at least 3 years. The teachers of the special education

department had special education professional background or trained to work with LD or special need students.

3.2 Procedures

Prior to contacting the schools, IRB approval was obtained from the university. After receiving a written consent from the school administration and the parents of the special need students, the participants were introduced to the study and later, the special educators explained the study to the LD students. Finally, the researcher explained to the NLD students ensuring them that it's not graded or examined neither their answers will impact their academic performance. The author assured that there is no right or wrong answer and it is a questionnaire for research. Confidentiality and anonymity of their responses was clearly emphasized during the data collection process. The participants were reminded that their participation was on a voluntary basis and they had the opportunity to withdraw at any point and the withdrawal would not inflict any academic or psychological harm. After obtaining participants' consent, data collection commenced by the author. The researcher read the questionnaire to the NLD students who were in general education classroom and LD students who were in the classroom and who were pulled-out from general education classrooms into the resource room.

3.3 Instruments

Students who were enrolled in the special education program are the ones who have a formal referral report by the educational psychologist. The students who participated in this research have had the formal psycho-educational assessment and diagnosed as having learning disabilities to be able to participate. Moreover, the

following assessment tools were used in the study in order to tap into the correlation between academic self-concept of special need students and their academic motivation and to test the stipulated hypotheses.

The *Academic Self-Concept Questionnaire* (ASCQ) (see Appendix 1): In order to measure academic self-concept of LD students and NLD, Academic Self-Concept Questionnaire was used. The tool was developed by Liu & Wang (2005); it consists of 20 questions that address the academic self-concept of the students, for example “I am interested in my school work” and “I study hard for my tests”. The questions are based on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (strongly Agree). As it relates to its previous usage, the instrument used was reliable with Cronbach’s alpha (α) ranging between 0.71 and 0.89 (Liu & Wang, 2008). For the comprehensibility of the questionnaire within the Lebanese context, a pilot study has been carried out on 15 students; minor modifications were needed in order to make the questionnaire more comprehensible.

Academic Motivation Scale in Middle School and High School (see Appendix 2): In order to measure the academic motivation of LD students and NLD students, Academic Motivation Scale in Middle School and High school was used which addresses the academic motivation of the students. The tool consists of 6 questions based on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (strongly Agree), for example: “I have a positive attitude toward school”, “I have enjoyed my school experience so far.” The instrument was previously used with .82 as the reliability score (Anderson-Butcher et al., 2013). The factorial validity of this scale is 0.73.

3.4 Data Analysis

It was hypothesized that LD students will score lower on academic self-concept than NLD students. In order to compare between LD and NLD students, a t-test analysis was conducted to assess group differences.

Second, as it was also hypothesized that students with LD who are in the inclusion setting will have lower academic self-concept than students with LD who are pulled-out into the resource room, data analysis for group differences was carried out by using t-test analysis.

A simple Pearson correlation was also conducted between academic self-concept and academic motivation for LD students using SPSS.

Chapter Four

Results

The following chapter will present the results of the research findings. Below are the outlined tables that indicate the respective outcomes of the data analysis process.

The total number of participants was 112; students were equally divided between LD, 56 participants (50%), and NLD, 56 participants (50%). On the other hand, LD students were divided into two equal groups: inclusion, 28 participants (25%) and pull-out, 28 participants (25%). 17 male and 11 female LD students participated in this research who were in inclusion settings, whereas, 13 male and 15 female LD students who were in pull out sessions. As for the NLD students, 30 female and 26 male students participated. The mean age of the LD students in the inclusion settings were 13.17, and for pull-out sessions 13.42. As for NLD students the mean age was 13.25.

For hypothesis 1, LD students will score lower on academic self-concept than NLD students, table 1 below indicates the descriptive statistics of self-concept for LD and NLD students. The mean of the Academic self-concept of LD students is 76.55 and for NLD students are 83.73. The standard deviation of LD students is 7.79 and for NLD is 6.37.

In order to test the first hypothesis, a t-test was conducted between LD and NLD students. The results, which are shown in the below table 3, show significant difference between academic self-concept of LD ($M= 76.55$, $SD = 7.79$) and NLD ($M= 83.73$, $SD=6.38$) students; $t(110) = -5.34$, $p= 0.00$. The following results

support the stipulated hypothesis and conclude that students with learning disabilities develop low lower self-concept compared to counterparts who do not have any learning difficulties.

Table 1:

Independent sample test for mean differences between Academic self-concept and Academic motivation.

	LD		NLD		<i>t</i> -test
	M	SD	M	SD	
Academic self-concept	76.55	7.79	83.73	6.37	.00**

Note: P < .01

For the second stipulated hypothesis, it was hypothesized that the academic self-concept and academic motivation of LD students will be positively and significantly correlated, $r = .694$, $n = 56$, $p = 0.00$. The results of the correlation between Academic self-concept and Academic motivation are presented below in table 2. The findings support the hypothesis: Academic self-concept and academic motivation are positively and significantly correlated.

Table 2: Descriptive Statistics for the Study Variables (N = 112)

Variables	Mean	SD	1	2	3	4	5	6
1. Age	13.34	2.8	-					
2. NLD	83.73	6.37	-	-				
3. LD pull-out	76.21	8.41	-	-	-			
4. LD inclusion	76.90	7.24	-	-	-	-		
5. Academic self-concept	80.14	7.08	-	-	-	-	-	
6. Academic motivation	80.89	7.69	-	-	-	-	.694**	-

** . Correlation is significant at the $P < 0.01$ level (2-tailed).

For the third hypothesis, Academic self-concept of Lebanese students with LD who are in inclusion settings is lower than academic self-concept of students with LD who are pulled-out into the resource room, the below table 5 shows there was no significant group difference.

To test the third hypothesis, a t-Test was conducted between academic self-concept of students with LD in inclusion (M = 76.90, SD = 7.24) and pull-out (M= 76.21,SD = 8.42), settings; $t(54) = -0.32, p=0.75$. The results which are shown in the below table 3 did not show any significant difference between the 2 groups. The academic self-concept of student's with LD who are in inclusion settings was not significantly different compared to the students who spend most of their time in the resource rooms.

Table 3:

Independent sample test for mean differences between Inclusion and pull-out students.

	LD pull-out		LD incusion		<i>t</i> -test
	M	SD	M	SD	
Academic self-concept	76.21	8.42	76.90	7.24	.75

Note: P < .01

After outlining the yielded results, the paper will turn to explain and discuss the outcome findings and make reference to the relevant theoretical conceptions that support the findings.

Chapter Five

Discussion and Summary

The researcher hypothesized that first the academic self-concept of students with Learning Disabilities is lower than the academic self-concept of non-Learning Disabled (NLD) students. Second, students with LD who scored higher on academic self-concept will score high on academic motivation and thirdly the academic self-concept of students with LD who are in inclusion settings is lower than academic self-concept of students with LD who are pulled-out into the resource room. To the best of the researcher's knowledge, no previous studies have focused on the self-concept of LD students in Lebanese schools. The educational psychology literature has heavily focused on studies conducted on Western cultures with different pedagogical practices that affect differently the way student's perceive themselves and the type of academic motivation that characterizes their learning experience. The research primarily is quantitative in nature and is based on responses to questionnaires from 112 participants both LD and NLD students.

The results of the current study indicate that the academic self-concept of NLD students was found to be higher than the academic self-concept of students with special education needs. Aligning these findings with the research literature, one possible explanation for the lower academic self-concept of the students with LD is found in social comparison theory by social psychologist Leon Festinger in 1954 which states that the individual learners continuously compare their personal capabilities to other people (Corcoran, Crusius & Mussweiler, 2011). Therefore, students with LD who are aware of their difficulties most probably compare themselves with non LD students and draw conclusions accordingly. In terms of

these comparisons, LD students might perceive their abilities as lower than their NLD counterparts. This comparison has strong impact in the way they approach learning. More recently, with the advent of inclusion movement, these students are mainstreamed in regular schools with non-disabled pupils. This inclusion can be turned into an environment for further comparison and thus it might further weaken their self-concept. In short, students with LD are prone to social comparison, which automatically affects how they evaluate their academic abilities, in other words, their academic self-concept. Given their underachievement in school settings prompted by their learning challenges, intellectual and socio-emotional difficulties, LD students often experience academic failure. As a result of receiving constant messages of inability, most probably LD students would negatively evaluate their academic abilities and view themselves as less competent. This in turn would reflect in a negative self-concept. Although these conclusive findings drawn from many studies have strong face value, still major criticism can be levelled in the way LD groups are operationalized. More specifically, from personal experience as a special needs teacher, LD students are often characterized into different categories: Mostly of those LD students who perform better than the low-achieving group of LD students. For example, students with behavioural difficulties, mainly those with conduct disorders, usually are capable of performing better on tests compared to students with severe learning disabilities (e.g. students with reading disorder, dyslexia). On the one hand, students with behavioural issues who do not meet classroom requirements fail to meet classroom rules expectations, which in turn negatively affects their school performance. On the other hand, providing LD students with behavioural concerns within the suitable learning environment, such as smaller classrooms, helps them reach their maximum potential and improve their performance in the school. This

observation has been accelerated by previous studies and investigations though the specificity of differentiation between behavioural and dyslexic students still remain an ignored topic of research and raises questions from a personal observation rather than a review from the literature.

Nevertheless, acknowledging the existing conceptual and academic differences among the broader heterogeneous group of LD students is a topic of discussion among special education teachers and researchers.

Second, the conclusion of this study that the self-concept of LD students is lower than the self-concept of NLD regular students is consistent with US research findings. For example, in a review of previous studies on children with learning disabilities, Bear, Minke & Manning (2002) found that, compared to regular students, students with learning difficulty perceived their academic ability as less favourable. Having in mind that no studies had compared the self-concept of LD students and compare it to NLD students, one can assume that the nature of the LD students' self-concept is consistently lower than NLD students regardless of the society within which students' learning experience is observed. In other words, LD students steadily display lower self-concept irrespective of their social or cultural environment.

Moreover, if traditionally the nature of a given culture, which is often dichotomized as individualistic vs. collectivistic, has imposed some type of influence on the way individuals identify themselves or perceive themselves (for example, Eaton & Louw, 2000) this conception of societal influence has been substantially confirmed by the fact that the academic self-concept of LD student is low irrespective of the nature of the society. Two major studies that support the observation that LD students have lower self- concept is Erlbaum et al., (2001) that

found that students with LD scored lower on academic self-concept than NLD students and Harter's (1998) which concluded that students with LD reported lower general intellectual ability than students without LD which explains the negative self-perception of the LD students .

A third conclusion is related to the social support that LD students receive from their wider school environment. Since LD students perceive a stronger social support from their friends compared to non-LD students (Cosden et al, 1997), this support is translated into at least improved academic self-concept and not necessarily academic achievement. However, this social support from peers can also carry hidden or false messages of sympathy. Hence, although LD students perceive and experience higher social-support from their peers, they might misinterpret this support as a sign of weakness, incompetence and inability. Thus they devalue their academic self-concept as a result of their own interpretation of the support. In other words, this social support, if perceived differently, can in fact widen the discrepancy between LD and NLD students' academic self-concept by reminding LD students of their disability. In fact, explaining the findings that LD students have lower academic self-concept requires further investigation in order to validate the findings.

Moreover, additional observations in different cultures other than Lebanon might as well add to the literature. For one reason, the method that was adopted for this study is heavily quantitative in nature, which clearly overshadows the deeper experiences of LD students including the way they perceive, analyse and react to social support. Since the following study did not attempt to understand the way LD students observe their social learning experience, further studies are needed to understand the way LD students translate these social messages.

Fourth, the results at hand are in line with the literature on self-concept. For example, two major meta analyses studies conducted at different periods have seemed to validate the conclusion that students with LD have lower self-concept compared to non-LD students. The first one is by Chapman (1988). He found that from the twenty-one studies reviewed only five showed significant difference between LD and non-LD students on global self-concept whereas the twenty studies that investigated academic self-concept confirmed the fact that LD students showed statistically significant difference with non-LD students. This was later followed up on by Zeleke et al., (2004) who updated Chapman's work and included research conducted up to 2004. Zeleke et al., (2004) limited and differentiated between the definition of self-concept as general and academic dimensions by excluding the other facets of the construct. This distinction between global and academic self-concept was based on Marsh and Hattie's (1996) study on the multidimensionality of the self-concept as a psychological construct. Zeleke concluded that around 19 out of 28 (68%) studies found no significant difference between LD and NLD students on global self-concept psychological construct. Chapman (1988) however, reviewed studies that tackled the self-concept of students with LD from 1974 to 1986. In his investigation, he also limited the definition of self-concept into general and academic dimensions by excluding the other facets of the construct. He found a positive association between academic concept and academic achievement for students with LD compared to students without learning difficulties. This association can be explained by the fact that the intellectual abilities of students, as learners, lower their perception of themselves by hindering the adaptation process. Due to lack of academic competencies needed to meet the learning and school requirements, LD students feel unprepared and thus unworthy as learners. This psychological

transaction later translated into low academic self-concept. In fact, research is still inconclusive with respect to the way that self-concept should be measured and whether educators should consider global or academic self-concept as the primary factor that influences student's learning experience. Hence, further investigation is needed to clearly understand the predictive power of global and academic self-concept in explaining students learning behaviour. Primarily, the academic self-concept might explain partially the way student's perceive themselves, himself or herself whereas at some early developmental school age, children in specific might be unable to differentiate between global and academic self-concept. Hence, children at earlier developmental stages might only represent themselves as an individual and not as a learner (Rochat, 2003). In short, additional investigation is required to develop a full understanding of the way LD children perceive themselves as individuals and as learners.

Fifth, the teaching methods and techniques that special educators use are differentiated according to the needs of each sub-group of LD students. This means that the very approach of the teacher's during instructional periods might influence or be influenced by the self-concept of LD students. Moreover, possibly, the very nature of the student's problems and the way teachers consider the presented problem might explain the differences of the self-concept between LD and NLD students. For example, empirically speaking, Durrant, Cunningham and Voelker (1990) pioneered in studying the inter-group self-concept of LD students and compared them to NLD students. According to the previous study of Durant, Cunningham and Voelker, LD students were divided into three major categories: LD students without behavioural problems (reading, writing and math difficulties), LD students who externalize their behaviour problems (conduct, hostility and antisocial

behaviours), thirdly, LD students with externalizing and internalizing students (mixed symptomology, depressed, withdrawn, introvert and anxious). The results of this correlational study showed higher scores on self-concept for the group of non-behaviour LD students compared to behaviourally disturbed LD students. However, surprisingly, the self-concept of non-behaviour LD students did not differ from those students without learning disability (NLD students). This last finding, which is considered a turning point in the literature of self-concept, showed that students who are categorized as learning disabled but do not display behavioural problems perceive themselves as equally academically capable as regular students. By excluding the heterogeneity of LD students, the remaining findings re-confirm previously held conclusion that in general students with LD perceive themselves more negatively than NLD students. In other words, no previous studies have made such an observation which can imply that LD students with non-behavioural problems perceive themselves academically capable and competent as NLD students.

Referring back to Durrant's et al (1990) finding, one can say that academic self-concept hinges on different factors including the way student's are perceived by their teachers, their experience with failure, motivational level, achievement, competency and importantly as the study above indicates the very "disability" that the student is suffering from. Hence, LD students are either consciously or unconsciously aware of their disability and construct their academic self-conception according to the way they frame this disability. For example, in addition to the fact that the academic self-concept of non-behavior LD students did not contrast with non-LD students, LD students who externalized and exhibited mixed symptomology showed significantly lower self-concept compared to LD non-behaviorally group and NLD students. A major conclusion that can be drawn from this study is the fact that

self-concept is primarily and more importantly associated with the behavior of the students followed by their learning disability. In fact, “the externalizing and internalizing scale scores were significant factors of cognitive self-concept” (Durrant et al, 1990, p. 665). Following this finding, one should question the *variables* that influence academic self-concept. Certainly, behavioural perception followed by achievement perception directly influence self-concept but in order to identify the remaining variables a regression analysis has to be conducted, which is currently lacking in the literature.

On the other hand, this conclusion seems to open new horizons of discussion after the mentioned personal observation where behavioural LD students were more likely to achieve higher than non-behavioural LD students. Based on the investigator’s observation, students with behavioural problems who are considered LD have outperformed LD students with specific learning difficulties. Yet according to Durrant’s conclusion behavioural LD students have lower academic self-concept compared to non-behavioural LD students. Hence, if the observation is further empirically verified, which is highly probable yet lacking, then the association between academic self-concept and academic achievement has to be revisited and re-explored by having in mind the direct influence of behaviour on student’s self-concept. Hence, we can only conclude that student’s academic self-perception is highly complex psychological phenomenon that is only partially influenced by the nature of the learning disability. We can also conclude that there is statistically significant variation among LD students themselves as much as there is significant difference on academic self-perception construct between LD and non-LD students. On the other hand, one should also question the mediating role of other academic, social and psychological factors in shaping the direction of self-concept within LD

students. Do prior experiences with failure determine and differentiate the self-concept of LD students? What about the influential role of general self-concept on academic self-concept of students with learning disabilities? Can positive general self-concept contribute positively to the betterment of the negative academic self-concept of LD students? If yes, then how? These questions require further investigations in order to reach a consensus on understanding the psychological makeup of LD children.

As for the second hypothesis, Lebanese students with LD who score higher on academic self-concept will score high on academic motivation; academic self-concept was found to be positively associated with academic motivation. It is likely that students with high academic self-concept might have developed self-regulation system in terms of their self-learning abilities, which is translated into motivation (Bandura, 1997). In other words, self-concept influences and predicts student motivation by helping them become self-regulated learners in the classroom. The concept of self-regulation refers to the degree to which students can regulate aspects of their thinking, motivation and behaviour during learning (Pintrich and Zusho, 2002). In practice, self-regulation is manifested in the active monitoring and regulation of a number of different learning processes, e.g. the setting of and orientation toward learning goals; the strategies used to achieve goals, the management of resources; the effort exerted; reactions to external feedback, and the output produced. Moreover, learners who develop high academic self-concept can become more interested in their learning experience, display and set academic goals towards achieving certain learning outcomes and consequently become more motivated to learn. Although the current study didn't look into a possible relation between self-concept and student's academic achievement, it is very likely that LD

students who have high self-concept will equally display high academic achievement since academic achievement is positively correlated with student's academic motivation (Pintrich, 2003). In short, the relation between LD student's academic self-concept and motivation can be explained by the influence of self-regulated learning process that regulated and direct students learning experience.

There is a growing body of research that investigates the role of self-regulated learning in relation to student's academic achievement. For example, in his seminal work on self-regulated learning of students, Zimmerman (1986) defined the term as the extent to which learners become active participants in the learning process meta-cognitively, behaviourally and motivationally. Moreover in their famous book on self-regulated learners and student's achievement, Zimmerman & Schunk (2001) believe that "...all definitions of self-regulated learning is a description of how and why students choose to use a particular self-regulated process, strategy, or response...operant theorists argue that all Self-regulated learning responses are ultimately under the control of external reward or punishment contingencies [whereas] phenomenologist, on the other hand, view students as motivated primarily by a sense of self-esteem or self-concept. Theorists between the two poles favour such motives as achievement success, goal accomplishment, self-efficacy, and concept assimilation" (p. 6). Therefore, clearly, students with high self-concept continuously regulated their learning behaviour by adopting cognitive strategies and consequently become motivated to achieve.

One has to be careful in interpreting these results, since highly motivated students can score higher on academic self-concept. Moreover, students who already have developed high academic self-concept might be more motivated to learn and study. Hence, more observations are needed to look into the way self-concept

influences motivation and understand which factor influences the respective factor. Yet, potentially the academic achievement of the students might explain the academic self-concept and academic motivation of the students. At this stage more research is needed to investigate the role of the student performance in explaining their motivation and self-concept.

In sum, the outcome of this study implies that academic self-concept can bring forth considerable information about the academic motivation of LD and NLD students. Although the results yielded a positive correlation between academic self-concept and academic motivation, it would be unwise at this stage to infer that student's with high academic self-concept are academically motivated. By having in mind the fact that external factors might motivate the students for example, as Boon, Burke, Fore & Spence (2006) found in their study, LD students expressed emotional attachment and found inspiration and motivation in teachers who were more likely to engage them in the learning process. Therefore, to infer a causal relationship between academic self-concept and academic motivation needs further investigation and research.

For the third proposition, results failed to support the hypothesis that students with LD who are in the inclusive settings score lower in their academic self-concept than students with LD who spend most of their time in the resource room or pull-out session. The results clearly contradict the well-known big-fish-little-pond effect which claims that students with low academic and intellectual ability are prone to attend similar low ability group in order to compare and improve their own self-concept (Seaton, Marsh & Craven, 2009). In the same direction, these students with low and medium academic abilities seek and receive motivation. As for LD students, the results show that the placement of the students, whether they are with LD or

NLD will not affect the student's academic self-concept and how they perceive themselves. One of the explanations can be found in the assumption that the academic environment of LD student enrolment does not have significant influence on the student's academic self-concept possibly because the process of self-concept development is shaped by other factors and not necessarily the placement in general education classroom or in the resource room. Many factors may affect the self-concept of the students with LD; it might be the involvement of the special education department or the awareness of the students of difficulty they are encountering in the learning experience. However, it is important to mention that when it comes to inclusive education or being in a regular school, one should take into consideration the impact of teachers, special educators, parents and students in the development of strategies and programs for the encouragement of academic and social development of children with learning disabilities.

Second, enrolling the LD students that have low academic self-concept in general education classroom with students who have high academic self-concept does not influence or change LD students self-evaluation as was hypothesized. In other words, on practical and teaching practices, teachers have to find alternative strategies to ameliorate the academic self-concept of students with LD instead of mainstreaming them in inclusive settings. Dyson (2003) found that children with LD have positive academic self-concept and high self-esteem when they receive positive feedback from teachers and parents. For this reason, further investigation is needed to find out underpinning reasons for the low scores of the LD students' self concept. As a suggestion, the achievement level can be a potential factor that might explain the low self-concept of the LD students. Possibly, the very nature of the LD student's learning difficulties or behavior, socio-emotional problems can influence they way

they perceive their academic competency and consequently react to these messages in a negative way. Finally, the teachers' instructional techniques and strategies might be considered a reliable intervention to raise the self-concept of the LD students by having in mind that their placement does not significantly influence their academic self-concept.

5.1 Conclusion

The study at hand investigated the academic self-concept of LD students and their motivation. The hypothesis stated that the self-concept of LD students is lower than the self-concept of NLD students. Results supported the first hypothesis. As for the second hypothesis which states that students with LD who score higher on academic self-concept will score high on academic motivation, the self-concept was assumed to be positively correlated with academic motivation of LD students which was supported by the findings. Finally, for the third hypothesis which claims that the academic self-concept of Lebanese students with LD who are in inclusive settings is lower than academic self-concept of students with LD who are pulled-out into the resource room, the self-concept of students who were placed in inclusive classrooms did not significantly differ from the self-concept of students who were pulled out for instructional purposes.

5.2 Limitations of the Study

Similar to other studies, the present study has certain limitations that constrain the applicability and the generalizability of the findings. For one reason, the participants who were selected to take part in the study were recruited from schools that have special education departments in Lebanon, which are mostly the private schools, hence were middle to upper middle class students. Part of the reason

is that there is no established special education system in the public school system in Lebanon. Consequently, disendfranchized students in the public school system were inevitably excluded.

Another limitation of the study lies in the cultural differences of the scales that were validated in environments outside of the Lebanese socio-cultural educational context. Both the Academic Self-Concept Questionnaire (ASCQ) and Academic Motivation Scale in Middle School and High School have been conceptualized and validated in Western societies and consequently their reliability and validity have rarely been estimated in a non-Western educational system. Finally, academic self-concept has been noted has the tendency to decline among students from early to mid adolescence, and also, it can extend to adulthood (Liu & Wang, 2005). Having in mind that the participants of this study were middle school students who at this developmental stage go through physical, psychological and emotional changes characteristics of adolescence might have impacted the results of the study.

5.3 Recommendations for future research

For future research, one has to extend the scope of this study to include students from non-private schools especially public schools (where some pilot special education programs have been implemented). Second, an investigation of possible differences between Lebanese and non-Lebanese students self-conception should be considered. For one reason, Lebanese society is mostly identified as a collectivistic culture where different groups including parents, teachers and other organizations might influence the way students perceive themselves as learners, whereas in other societies, particularly individualistic cultures, students' self-

conception can be the outcome of their individual interactions. Finally, adopting different methods of observing the relation between academic self-concept and motivation will help us better understand the nature of the relationship between the two concepts since solely relying on questionnaires limits the thorough examination of this relation. For example, classroom observation and direct interview will certainly assist the author to explain the relation between the two variables.

Practically, for teaching practices, the outcome of the following study should raise further research-informed awareness for teachers and students alike in terms of student low self-concept and its association with academic motivation. Instead, classroom dynamics and teaching and learning practices should primarily focus on maintaining positive self-concept by providing positive feedback (Manning, 2006). Finally, the findings of this study inform teachers about the importance of considering students self-concept during preparation and instruction sessions.

Reference

- Anderson-Butcher, D., Amorose, A.J., Iachini, A., & Ball, A. (2013). Community and Youth Collaborative Initiative School Community Surveys: Academic Motivation Scale in Middle School and High School. Columbus, OH: College of Social Work, The Ohio State University.
- Areepattamannil, S. (2012). Mediatlional role of academic motivation in the association between school self-concept and school achievement among Indian adolescents in Canada and India. *Social Psychology of Education, 15*(3), 367-386.
- Bandura, A. (1997). Self-efficacy and health behaviour. In A. Baum, S. Newman, J. Wienman, R. West & C. McManus, (Eds.), *Cambridge handbook of psychology, health and medicine* (pp. 160-162).
- Bear, G. G., Minke, K. M., & Manning, M. A. (2002). Self-concept of students with learning disabilities: A meta-analysis. *School Psychology Review, 31*, 405-427.
- Boon, R., Burke, M., Fore, C., & Spencer, V.G. (2006). The impact of cognitive organizers and technology-based practices to promote student success in secondary social studies classrooms. *The Journal of Special Education Technology, 21*(1), 5-15.
- Blackford, Susan C., (2010). Knowledge and Perceptions of Students with Disabilities in Regard to a Resource Room in a Private School. Mater of Education Thesis, Cedarville University, Ohio, United States.

- Brewster, C., & J. Fager. 2000. Increasing student engagement and motivation: From time on task to homework. Portland, OR: Northwest Regional Educational Laboratory.
- Cambra, C. (2002) Acceptance of deaf students in regular classrooms, *American Annals of the Deaf*, 147.
- Chapman, J. W. (1988). Learning-disabled children's self-concepts. *Review of Educational Research*, 58, 347-371.
- Cokley, K. O. (2000). An investigation of academic self-concept and its relationship to academic achievement in African American college students. *Journal of Black Psychology*, 26, 148-164.
- Comer, J. P. (2004). *Leave No Child Behind Preparing Today's Youth for Tomorrow's World*, Integrated Publishing Solutions, USA.
- Corcoran, K., Crusius, J., & Mussweiler, T. (2011). Social comparison: Motives, standards, and mechanisms, *Theories in social psychology*, 119–139.
- Cosden, M. A., & McNamara, J. (1997). Self-concept and perceived social support among college students with and without learning disabilities. *Learning Disability Quarterly*, 20, 2-12.
- Durrant, J. E., Cunningham, C. E., & Voelker, S. (1990) Academic, social, and general self-concepts of behavioral subgroups of learning disabled children, *Journal of Educational Psychology*, 82, 657-663.
- Dyson, L. L. (2003), Children with Learning Disabilities Within the Family Context: A Comparison with Siblings in Global Self-Concept, Academic Self-

- Perception, and Social Competence. *Learning Disabilities Research & Practice*, 18: 1–9.
- Dweck, C.S. (1986). Motivational process affecting learning. *American Psychologist*, 41, 1040-1048.
- Eaton, L., & Louw, J. (2000). Culture and self in South Africa: Individualism-collectivism predictions. *The Journal of social psychology*, 140(2), 210-217.
- Elbaum, B. (2002). The Self-Concept of Students with Learning Disabilities: A Meta-Analysis of Comparison Across Different Placements. *Learning Disabilities Research & Practice*, 7(4),216-226.
- Elbaum, B. & Vaughn, S. (2001). School-Based Intervention to Enhance the Self-Concept of Students with Learning Disabilities: A Meta-Analysis. *The Elementary School Journal*, 101(3), 303-329.
- Gans, A. M., Kenny, M. C., & Ghany, D. L. (2003). Comparing the self-concept of students with and without learning disabilities. *Journal of Learning Disabilities*, 36, 287–295.
- Grolnick, W. S., & Ryan, R. M. (1990). Self-perceptions, motivation, and adjustment in children with learning disabilities: A multiple group comparison study. *Journal of Learning Disabilities*, 23,177-184.
- Guay, F., Marsh, H. W., & Boivin, M. (2003). Academic self-concept and achievement: Developmental perspective on their causal ordering. *Journal of Educational Psychology*, 95,124-136.

- Harter, S. (1998). The development of self-representation. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional and personality development* (5th ed., pp. 553- 617). New York: Wiley.
- Hallahan, D. P. & Kauffman, J. M. (2003). *Exceptional learners: Introduction to special education (9th ed.)*. Boston: Allyn and Bacon
- Huetinck, L. & Munshin, S.N. (2008). *Teaching Mathematics in the 21st Century: Methods and Activities for Grades 6 – 12. Allyn & Bacon, NY , p. 49 – 51.*
- Humphrey, N. (2004). The death of the feel-good factor? Self-esteem in the educational context. *School Psychology International, 25*, 347-360.
- Humphrey N.& Mullins P. M. (2002). Personal constructs and attribution for academic success and failure in dyslexia. *British Journal of Special Education, 29*, 196-203.
- Klingner, J. K., Vaughn, S., Schumm, J. S., Cohen, P., & Forgan, J. (1988). Inclusion or pull-out: Which do students prefer? *Journal of Learning Disabilities, 31*, 148-158.
- Knight, B. A. (1999). Towards inclusion of students with special educational needs in the regular classroom. *Support for Learning, 14*, 3-7.
- Kostelecky, Kyle L. and Mark J. Hoskinson. A “novel” approach to motivating students. *Education 125*(3), 438-442.
- Lackaye, T. D., & Margalit, M. (2006). Comparisons of achievement, effort and self-perceptions among students with learning disabilities and their peers from different achievement groups. *Journal of Learning Disabilities, 39*, 432–446.

- Lent, R. W., Brown, S. D., & Gore, P. A. (1997). Discriminant and predictive validity of academic self-concept, academic self-efficacy, and mathematics-specific self-efficacy. *Journal of Counseling Psychology*, 44, 307-315.
- Liu, W. C., & Wang, C. K. J. (2005). Academic Self-Concept: A Cross-Sectional Study of Grade and Gender Differences in a Singapore Secondary School. *Asia Pacific Education Review*, 6(1), 20-27.
- Levine, M. (2003). *The Myth of laziness*. Simon and Schuster, NY NY.
- Lewis, J. D., & Knight, H. V. (2000). Self-concept in gifted youth: An investigation employing the Piers-Harris subscales. *Gifted Child Quarterly*, 44, 45-53.
- Malikow, M. (2005) *Effective Teacher Study*. National Forum of Teacher Education Journal electronic. Vol. 16, N 3E,
- Margolis, Howard & Patrick P. McCabe. (2006). Improving self-efficacy and motivation: What to do, what to say. *Intervention in School and Clinic*, 41(4), 218-227.
- Marsh, D. (2002). Content and Language Integrated Learning: The European Dimension - Actions, Trends and Foresight Potential.
- Marsh, H. W. (2004). Negative effects of school-average achievement on academic self-concept: A comparison of the big-fish-little-pond effect across Australian states and territories. *Australian Journal of Education*, 48, 5-26.
- Marsh, H. W., & Craven, R. G. (2002). The pivotal role of frames of reference in academic self-concept formation: The big-fish-little-pond effect., *Adolescence and education*, 2, 83 – 123.

- Marsh, H. W., Craven, R., & McInerney, D. M. (2008). *Advances in self research*. Vol. 3. Self-processes, learning, and enabling human potential: Dynamic new approaches. Charlotte, NC: Information Age.
- Marsh, H.W., & Hattie, J. (2002). The relation between research productivity and teaching effectiveness—Complementary, antagonistic, or independent constructs? *Journal of Higher Education*, 73(5), 603-641.
- Marsh, H. W., & O'Mara, A. (2008). Reciprocal effects between academic self-concept, self-esteem, achievement, and attainment over seven adolescent years: Unidimensional and multidimensional perspectives of self-concept. *Personality and Social Psychology Bulletin*, 34, 542-552.
- Marsh, H. W., & Shavelson, R. (1985). Self-concept: Its multifaceted, hierarchical structure. *Educational Psychologist*, 20, 107-123.
- Marsh, H. W., Trautwein, U., Ludtke, O., Koller, O., & Baumert, J. (2005). Academic self-concept, interest, grades, and standardized test scores: Reciprocal effects models of causal ordering. *Child Development*, 76, 397–416.
- Mastropieri, M. A., & Scruggs, T. E. (1994). *Effective instruction in special education* (2nd ed.). Austin, TX: PRO-ED.
- McGee, R., & Williams, S. (2000). Does low self-esteem predict health compromising behaviours among adolescents? *Journal of Adolescence*, 23, 569–582.
- Mui, F. L. L., Yeung, A. S., Low, R., & Jin, P. (2000). Academic self-concept of talented students: Factor structure and applicability of the internal/external

- frame of reference model. *Journal for the Education of the Gifted*, 23, 343-367.
- Nagy, G., Trautwein, U., Baumert, J., Koller, O., & Garrett, J. (2006). Gender and course selection in upper secondary education: Effects of academic self-concept and intrinsic value. *Educational Research and Evaluation*, 12, 323-345.
- Nelson, J.R., Benner, G. J., Lane, K., & Smith, B. W. (2004). Academic achievement of K-12 students with emotional and behavioral disorders. *Exceptional Children*, 71, 59-73.
- O'Mara, A. J., Marsh, H. W., Craven, R. G., & Debus, R. L. (2006). Do self-concept interventions make a difference? A synergistic blend of construct validation and meta-analysis. *Educational Psychologist*, 41, 181-206
- Parker, J. (1966). The relationship of self-report to inferred self-concept. *Educational and Psychological Measurement*, 26, 691-700.
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology*, 101, 115.
- Pelletier, L. (2006) why do high school students lack motivation in the classroom? Toward an understanding of academic amotivation and the role of social support. *Journal of Educational Philosophy* 98(3), 567-582.
- Pijla, J.S, Skaalvikb, M.E. & Skaalvikb, S (2010). Students with special needs and the composition of their peer group. *Irish Educational Studies*, 29(1), 57-70.

- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667.
- Pintrich, P. R., & Zusho, A. (2002). The development of academic self-regulation: The role of cognitive and motivational factors. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 249– 284). San Diego, CA: Academic.
- Rochat, P. (2003). Five levels of self-awareness as they unfold early in life. *Consciousness and Cognition, 12*, 717-731.
- Salend, S. J., & Duhanney, L. G. (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education, 20*, 114-126.
- Schunk, D. H. (2005). Self-regulated learning: The educational legacy of Paul R. Pintrich. *Educational Psychologist, 40*(2), 85-94.
- Schultz, K. (2003). *Listening: A framework for teaching across differences*. New York: Teachers College Press.
- Schmidt, M. & Čagran, B.(2008).Self-Concept of Students in Inclusion Setting. *International Journal of Special Education, 23*(1), 8-17.
- Seaton, M., Marsh, H. W., & Craven, R. G. (2010). Big-Fish-Little-Pond-Effect: Generalizability and Moderation – Two Sides of the Same Coin. *American Educational Research Journal, 47*(2), 390–433.

- Sideridis, G. D. (2003). On the origins of helpless behavior in students with learning disabilities: Avoidance motivation? *International Journal of Educational Research*, 39, 497-517.
- Sideridis, G. D. (2005). Performance approach-avoidance orientation and planned behaviour theory: Model stability with Greek students with and without learning disabilities. *Reading and Writing Quarterly*, 21, 331-359.
- Sideridis, G. D. (2006). Understanding low achievement and depression in the LD: A goal orientation approach. *International Review of Research in Mental Retardation*, 31, 163-203.
- Sideridis, G. D., Morgan, P. L., Botsas, G., Padeliadu, S., & Fuchs, D. (2006). Predicting LD on the basis of motivation, metacognition, and psychopathology: An ROC analysis. *Journal of Learning Disabilities*, 39, 215-229.
- Silverthorn, N., DuBois, D., & Crombie, G (2005). Self-perceptions of ability and achievement across high school transition: Investigation of state-trait model. *The Journal of Experimental Education*, 73, 191-218.
- Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Chung, C. G. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children*, 74(3), 264-288.
- Smith, C. R. (1994). *Learning disabilities: The interaction of learner, task, and setting* (3rd ed.). Boston: Allyn & Bacon.
- Tabassam, W. & Grainger, J. (2002). Self-Concept, Attributional Style and Self-Efficacy Beliefs of Students with Learning Disabilities with and without

- Attention Deficit Hyperactivity Disorder. *Learning Disability Quarterly*, 25(2),141-151.
- Trautwein, U., Ludtke, O., Koller, O., & Baumert, J. (2006). Self-esteem, academic self- concept, and achievement: How the learning environment moderates the dynamics of self-concept. *Journal of Personality and Social Psychology*, 90, 334- 349.
- Tsang, S., Hui, E., & Law, B. C. (2012). Positive Identity as a Positive Youth Development Construct: A Conceptual Review. *The Scientific World Journal*, 2012, 1-8.
- Vaughn, S. Bos, C., & Schimim,(1997). Teaching mainstreamed, diverse, and at-risk students. Needham Heights, Mk Allyn & Bacon.
- Wang, C. K. J., & Liu, W. C. (2008). Promoting Intrinsic Motivation in Physical Education: The Role of Beliefs, Goals, and Self-Determination. In Towndrow, P. A., Koh, C., & Tan, H. S. (Eds.), *Motivation and practice for the classroom* (pp. 129-142). Netherlands: Sense Publishers.
- Westwood, P. & Graham, L. (2003). Inclusion of students with special needs: benefits and obstacles perceived by teachers in New South Wales and South Australia. *Australian Journal of Learning Disabilities*, 8, 3-15.
- Wick, J. W. (1990). Comprehensive assessment program: SAM attitude measures technical manual. Iowa City, IA: American Testronics.
- Wiener, J. & Tardif, C. Y. (2004). Social and emotional functioning of children with learning disabilities: special education placement make a difference? *Learning Disabilities Research & Practice*, 19(1), 32-45.

- Wiest, D., Wong, E., Cervantes, J., Craig, L., & Kreil, D. (2001). Intrinsic motivation among regular, special, and alternative education high school students. *Adolescence*, 36, (141), 111-126.
- Wigfield, A., & Eccles, J. S. (2002). The development of competence beliefs, expectancies for success, and achievement values from childhood through adolescence. *Development of Achievement Motivation*, 91-120.
- Zimmerman, B. J. (1986). Development of self-regulated learning: Which are the key sub-processes? *Contemporary Educational Psychology*, 16, 307-313.
- Zimmerman, B. J., & Schunk, D. H. (Eds.) (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Routledge.
- Zelege, S. (2004) Self-Concepts of students with learning disabilities and their normal achieving peers: a review. *European Journal of Special Needs Education*, 19(2), 142-170.

Appendix 1

Instruction: Kindly circle one response for the following question.

Strongly Disagree	Disagree	Can't decide	Agree	Strongly Agree	
1	2	3	4	5	
1. I can follow the lesson easily	1	2	3	4	5
2. I day-dream a lot in class	1	2	3	4	5
3. I am able to help my classmates in their schoolwork	1	2	3	4	5
4. I often do my homework without thinking	1	2	3	4	5
5. If I work hard, I think I can go to the University	1	2	3	4	5
6. I pay attention to the teachers during lesson	1	2	3	4	5
7. Most of my classmates are smarter than I am	1	2	3	4	5
8. I study hard for my tests	1	2	3	4	5
9. My teachers feel that I am poor in my work	1	2	3	4	5
10. I am usually interested in my schoolwork	1	2	3	4	5
11. I often forget what I have learnt	1	2	3	4	5
12. I am willing to do my best to pass all the subjects	1	2	3	4	5
13. I get frightened when I am asked a question by the teachers	1	2	3	4	5
14. I often feel like quitting school	1	2	3	4	5
15. I am good in most of my school subjects	1	2	3	4	5
16. I am always waiting for the lesson to end.	1	2	3	4	5

17. I always do poorly in tests	1	2	3	4	5
18. I do not give up easily when I am faced with a difficult question in my schoolwork	1	2	3	4	5
19. I am able to do better than my friends in most subjects	1	2	3	4	5
20. I am not willing to put in more effort in my schoolwork	1	2	3	4	5

Appendix 2

Instruction: Kindly circle one response for the following question.

Strongly disagree	Disagree	Can't decide	Agree	Strongly Agree			
1	2	3	4	5			
1. I have a positive attitude toward school.			1	2	3	4	5
2. I feel I have made the most of my school experiences so far.			1	2	3	4	5
3. I like the challenges of learning new things in school.			1	2	3	4	5
4. I am confident in my ability to manage my schoolwork.			1	2	3	4	5
5. I feel my school experience is preparing me well for adulthood.			1	2	3	4	5
6. I have enjoyed my school experience so far.			1	2	3	4	5