2011

Student Organizational Skills and Motivation: What's the Connection?

Vesna Cejovic
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss

Part of the Curriculum and Instruction Commons

Recommended Citation
Dissertations. 51.
https://ecommons.luc.edu/luc_diss/51

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
Copyright © 2011 Vesna Cejovic
LOYOLA UNIVERSITY CHICAGO

STUDENT ORGANIZATIONAL SKILLS AND MOTIVATION:
WHAT’S THE CONNECTION?

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF EDUCATION

PROGRAM IN CURRICULUM AND INSTRUCTION

BY
VESNA CEJOVIC
CHICAGO, ILLINOIS
MAY 2011
Copyright by Vesna Cejovic, 2011
All rights reserved.
ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my Loyola University Doctoral Committee beginning with chairperson, Dr. Ruanda Garth-McCullough without whom the process of beginning this journey would have been infinitely more difficult. Thank you for taking a chance on a student you hardly knew, for your honesty and encouragement and guiding hand. Thank you also to my readers, Dr. Barney Berlin for lending his precious time and invaluable experience to this process always questioning the WIP, to Dr. Lori Bein, my old colleague and friend, for the personal and professional motivation you provided, and to Dr. Ernestine Riggs, for her willingness to step in at a moment’s notice in the interest of furthering knowledge. You are true champions of the work that educators do and the mentors they should represent. Thank you; it was an honor to have you on board. A final thanks to my friend Nicole Molnar and her wonderful class for opening their door to me.
DEDICATION

To my family…

First to my parents, for raising me to believe accomplishment was always within me and for handing me an opportunity that so many others have to work so hard to afford…

To my brother, for the inspiration his crumpled homework and back pocket filing system provided…

To ALL four grandparents, for making it difficult for my children to miss me…

To those wonderful children who never complained and whose love pushed me to want to walk across that stage…

And to my husband, who for years selflessly devoted himself to this as though it was his own…listening, discussing, planning, encouraging, babysitting, consoling and always remembering to remind me of just how proud he was…

I thank you and I love you for helping make my dream come true.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS .......................................................................................................................... iii

LIST OF TABLES ........................................................................................................................................ viii

LIST OF FIGURES ....................................................................................................................................... ix

ABSTRACT ................................................................................................................................................ x

CHAPTER I: INTRODUCTION TO THE STUDY .................................................................................... 1
  Background ............................................................................................................................................... 1
  Problem Statement .............................................................................................................................. 2
  Research Questions ............................................................................................................................. 4
  Purpose .................................................................................................................................................. 4
  Conceptual Framework ....................................................................................................................... 5
  Related Concepts ............................................................................................................................... 8
  Scope, Limitations and Delimitations ................................................................................................. 11
  Significance of the Study .................................................................................................................. 12
  Implications for Social Change ........................................................................................................ 15
  Summary ............................................................................................................................................. 16

CHAPTER II: REVIEW OF RELATED LITERATURE ........................................................................ 18
  Introduction .......................................................................................................................................... 18
  Organizational Skills .......................................................................................................................... 19
    The Discrepancy ............................................................................................................................... 19
    The Assumption ................................................................................................................................ 22
  Psychological Needs and Self-Motivation ......................................................................................... 26
  Summary ............................................................................................................................................. 36

CHAPTER III: RESEARCH METHODOLOGY .............................................................................. 38
  Nature of the Study .............................................................................................................................. 38
  Research Design ................................................................................................................................ 39
    Data Sources ......................................................................................................................................... 39
    Setting and Sample ............................................................................................................................. 41
    Data Collection ................................................................................................................................... 42
    Validity ................................................................................................................................................ 45
    Data Analysis ....................................................................................................................................... 48
    Quantitative Data ............................................................................................................................... 49
    Qualitative Data .................................................................................................................................. 49

CHAPTER IV: PRESENTATION AND ANALYSIS OF DATA ...................................................... 51
  Introduction .......................................................................................................................................... 51
  Procedure ............................................................................................................................................... 52
  Pre-Intervention Results .................................................................................................................... 54
LIST OF TABLES

Table 1: Highly Motivated Student Organizational Ratings Pre-Intervention ............... 58
Table 2: Moderately Motivated Student Organizational Ratings Pre-Intervention........... 59
Table 3: Poorly Motivated Student Organizational Ratings Pre-Intervention................. 59
Table 4: Highly Motivated Student Questionnaire Results Pre-Intervention .................. 63
Table 5: Moderately Motivated Student Questionnaire Results Pre-Intervention .......... 64
Table 6: Poorly Motivated Student Questionnaire Results Pre-Intervention.................... 64
Table 7: Question #4 Response Analysis Pre-Intervention ............................................. 66
Table 8: Highly Motivated Student Organizational Ratings Mid-Intervention............... 90
Table 9: Moderately Motivated Student Organizational Ratings Mid-Intervention...... 90
Table 10: Poorly Motivated Student Organizational Ratings Mid-Intervention ............. 91
Table 11: Highly Motivated Student Organizational Ratings Post-Intervention .......... 96
Table 12: Moderately Motivated Student Organizational Ratings Post-Intervention ...... 96
Table 13: Poorly Motivated Student Organizational Ratings Post-Intervention .......... 97
Table 14: Highly Motivated Student Questionnaire Results Post-Intervention .......... 104
Table 15: Moderately Motivated Student Questionnaire Results Post-Intervention ...... 104
Table 16: Poorly Motivated Student Questionnaire Results Post-Intervention .......... 105
Table 17: Question #4 Response Analysis Post-Intervention ...................................... 108
LIST OF FIGURES

Figure 1: A Model for the Perpetuation of Self-Motivational Tendencies ....................... 13

Figure 2: One-Way ANOVA Analysis Output for Pre-Intervention Organization Means Comparison ........................................................................................................ 61

Figure 3: One-Way ANOVA Analysis Output for Mid-Intervention Organization Means Comparison ............................................................................................... 93

Figure 4: One-Way ANOVA Analysis Output for Post-Intervention Organization Means Comparison ............................................................................................... 99

Figure 5: Paired Sample T-Test Output for Comparison of Pre-Intervention and Post-Intervention Organizational Rating Means for Highly Motivated Students ........................................................................................................ 101

Figure 6: Paired Sample T-Test Output for Comparison of Pre-Intervention and Post-Intervention Organizational Rating Means for Moderately Motivated Students ........................................................................................................ 102

Figure 7: Paired Sample T-Test Output for Comparison of Pre-Intervention and Post-Intervention Organizational Rating Means for Poorly Motivated Students ........................................................................................................ 102
ABSTRACT

Many studies have pointed out the academic advantages of teaching students to be more organized. While there is a great deal of information with regard to organizational skills of students, and an immense amount of inquiry into the phenomenon of motivation in nearly every field of study, there have been incredibly few studies that have combined the two issues in an effort to examine the potential relationship between organizational skills and self-motivation and how that relationship might help to increase the importance of making organizational skills an indispensable element of elementary school curricula. This mixed-methods, pretest/posttest case study examined a classroom of 23 fifth-grade students in a suburban Chicago public school in order to gain a deeper understanding of student organization and the effect it might have on student ability to self-motivate. Framed by self-determination theory, the study proposed that student organizational skills may impact students’ feelings of competence, relatedness and autonomy which determine their ability to be self-motivated. To explore this, a six week organizational skills intervention was imposed on the class to increase organization so that any changes to motivation might be documented by comparison. Initially, the study found that there was a statistically significant difference in the organizational abilities of highly motivated students and their moderately and poorly motivated counterparts. Over the course of pre-intervention and post-intervention measures it was discovered that roughly 98% of the students had improved their organizational skill as a result of the intervention. The same
data sources would reveal that students had also begun to make small improvements with regard to competence, relatedness, and autonomy, implying that motivation was improving as well.
CHAPTER I

INTRODUCTION TO THE STUDY

Background

For entrepreneurs, ignorance is not bliss. It’s fatal. It’s costly… You either get organized, or get crushed. - Donald J. Trump.

The world of curriculum presents a broad range of issues to be considered when constructing a plan for imparting knowledge to students for success in the real world. While there are many issues raised from different problems encountered in curriculum planning, execution and assessment there are not as many opportunities for clear cut answers. However, often when there seems to be no clear solution the best place to start is with the fundamentals. Being a successful learner without the ability to organize and turn assignments in on time is just as difficult as being a successful basketball player without knowing how to dribble. It could be said that fundamental tools are just as important to learning as they are to success in sports, art, and music along with a host of other tasks and activities. As a result, many curriculum issues should be approached first through an examination of the fundamental skills which lend themselves to the ability to attain certain curriculum goals. Organizational skills for instance, can be argued to be an irreplaceable building block on the list of skills necessary to succeed in almost any setting or any field (Fry, 2005). Considering that schools are the preparatory instruments through which we train students to attain the skills and knowledge they will need to succeed later in life, it seems only logical that teaching or at least supporting the
development of strong organizational skills should be an imperative part of school
curriculum (Monahan & Torrisi, 2000). The problem, however, is that in many schools
students are expected to develop their own organizational skills and systems to keep their
desks, papers, assignments, and activities organized. Teachers sometimes make the
mistake of assuming that children can learn and attain organizational skills on their own,
which can be costly (Bakanus & Holley, 2004). With the increasing number of activities
and responsibilities that even young students are subjected to, making sure students are
equipped with the skills to manage all of those expectations is becoming a more and more
important part of classroom learning.

**Problem Statement**

The fact is that organizational skills are a prerequisite for success and that those
skills must be taught to children (Fry, 2005; Gambill, Moss & Vescogni, 2008). It is
these skills that help students become successful in school and continue to be successful
in the working world (Fry, 2005). Unfortunately, many students, particularly at the
middle school and high school levels, struggle with the basic organizational skills
necessary for them to make the most of their educational experience (Boller, 2008;
Breeden, 2000; Gambill, Moss & Vescogni, 2008) and therefore may be at risk of
limiting their options for the future (Fry, 2005) before they are even able to be aware of
it.

Many studies have pointed out the academic advantages of teaching students to be
more organized (Foley, 1989; Lobay, 1993; Monahan et al., 2000; Orr, 1996). Even so, it
seems that the teaching and development of organizational skills in young students falls
short of the list of priorities all too often (Anday-Porter, Henne, & Horan, 2000). Some of those same studies have documented the negative impact that the lack of these skills can have on self-esteem and self-efficacy in students. Perhaps the effects of organizational skills on academic success aren’t enough to convince the masses that these skills should be taught as part of a curriculum. After all, it is common knowledge these days that there are a great number of extremely successful and wealthy people who can attest to the fact that their college degree did not get them as far as they have come, that in fact they never received a college degree at all (Wikipedia, 2010). “Learning is mostly about creating a context for motivation. It’s about why you should learn things” (Time Magazine, 10 Questions for Bill Gates, February 1, 2007). Without a college degree in common, only motivation is left to bring them their success. This suggests that perhaps studies on the effects of organizational skills need to broaden their range of research in order to examine other areas of influence that organizational skills might have, namely those on student self-motivation.

While there is a great deal of information with regard to organizational skills of students both young and old, and an immense amount of inquiry into the phenomenon of motivation in nearly every field of study, there have been incredibly few studies that have combined the two issues in an effort to examine the potential relationship between organizational skills and self-motivation and how that relationship might help to increase the importance of making organizational skills an indispensable element of elementary school curricula. As such, in order to gain a deeper understanding of student organization and the effect it might have on student ability to self-motivate, the researcher has use a
mixed-methods approach in collecting and analyzing the data on student organization and motivational levels gleaned from this study.

**Research Questions**

1. How do students’ organizational skills influence self-motivation?
   
   a. How do organizational skills influence student competence, relatedness and autonomy?

Investigating these questions will lead to a deeper understanding of how organization can be linked to self-motivation in students within the constructs set forth by Self-Determination Theory (SDT) (Deci & Ryan, 2000). Some research has already revealed that more organized students tend to spend more time on task (Orr, 1996) which often leads to better performance. Other studies have pointed out that students who perform better have higher feelings of self-efficacy (Mclean, 1995) and that students who display both higher performance and higher self-efficacy experience greater autonomy (Berger, 2003; Foley 1989) potentially leading to increased relatedness to teachers and classmates. The basic psychological needs highlighted by Self-Determination Theory as imperative to student progression toward self-motivation are reflected in the questions set forth and organization is the focal point that makes them one.

**Purpose**

The main purpose of this study within the framework of SDT was to reveal a relationship between student organization and the students’ potential to be intrinsically self-motivated beginning with the effect of those organizational skills on student achievement which as research has shown indicates that “students who were exposed to
an organizational skills curriculum needed less assistance getting and staying organized than did the group not exposed to the curriculum” (Orr, 1996). The study further aimed at building an understanding through students, of how organization could positively influence achievement and how that might lead to increased feelings of self-efficacy (McLean, 1995) which together may fuel initial feelings of self-motivation (Berger, 2003; Foley, 1989) in relation to autonomy and could influence a student’s ability to relate positively to teachers and classmates. According to this logic, it is possible that organizational skills could lead to qualities like higher achievement and increased self-efficacy which can help to increase the chances that a student will take advantage of opportunities offered by a teacher that lead to the fulfillment of those basic needs deemed imperative by SDT to achieve his/her highest potential for optimal functioning, behavioral change and personal growth/reflection progressing the student toward intrinsic self-motivation and regulation. Achieving immunity to external forces of motivation increases engagement and creativity leading to even higher achievement (Hennessey, 2001) and in theory recreates a positive cycle that begins with the ability to be organized.

**Conceptual Framework**

Understanding why a student does or does not do something to the best of their ability is an issue concerned with student motivation and one that teachers and educational professionals wrestle with on a day-to-day basis (Breeden, 2000; McLean, 1995; Orr, 1996). Teachers in particular are often exasperated by the apparent disinterest many students exhibit at one time or another to the point that many rely on coercion and reward incentives to get students to complete assignments, participate in activities and
prepare accordingly for assessments. Supporters of self-determination theory (SDT) have argued that those teachers are only causing bigger problems in terms of motivation both for themselves and their students (Hennessey, 2001; Lepper, Greene & Nisbett, 1973).

Self-determination theory has guided many of the more recent investigations into student behavioral tendencies. SDT is a general theory of motivation that evolved from early studies in the 1970s aimed at examining the influence of extrinsic and intrinsic motivation on individual behavior and the degree to which those different types of motivation (intrinsic or extrinsic) were able influence choices and action in subjects.

Though self-determination theory can be applied across a broad spectrum of issues and research topics, in the last decade it has left its mark most notably in the field of social psychology particularly with regard to education and student motivation. Developed by Edward Deci, PhD and Richard Ryan, PhD of the University of Rochester, SDT at its most fundamental level is based on three basic psychological needs (competence, autonomy and relatedness) whose fulfillment or lack thereof determines the degree to which a student will be able to achieve his/her highest potential for optimal functioning, behavioral change and personal growth/reflection (Deci & Ryan, 2000). The theory assumes that human beings are naturally in search of opportunities for personal growth, expression of competence, participation in meaningful interpersonal relationships, and autonomy in one’s choices and actions. The purpose of the theory is aimed at providing a framework that can help explain the different types of motivation and what things can affect that motivation including contextual and environmental influences. It also looks at how different degrees of internalization of influences create a continuum of self-
determination that makes some individuals more intrinsically motivated (autonomous) while others are obviously more susceptible to extrinsic forces (controlled). At its core, the theory deals with the internalization of values that each of us assigns to the people, beliefs, goals, and events that we experience in life and how that history of internalization commands our dependence on internal or external motivation throughout. Understanding why we do or don’t do certain things in the context of “‘human needs and the self-determination of behavior’ is the latest, and in many respects the most ambitious, contribution to what some have termed the rebirth of motivational research” (Hennessey, 2001, p. 293). With respect to the late revival of interest in motivational research there are many studies that have already tested SDT in the educational context with both innovative approaches and intriguing results.

As for the current study, SDT provided the framework that would lead to a better understanding of how student organizational skills effect or influence the fulfillment of the basic psychological needs proposed by Deci and Ryan (2000) as imperative to the progress of students toward optimal functioning and ultimate self-determination. This study suggests that students’ organizational skills have the potential to influence factors that may contribute to the fulfillment of students’ needs for competence, autonomy and relatedness. SDT provided the framework that would help to show how the organizational skills of a student could influence intrinsic self-motivation.
Related Concepts

The concepts discussed below are imperative to the study and must be defined in the context of this study to ensure clarity.

Webster’s Dictionary (1999) defines organization as the act of “arranging in an orderly way, to make into a whole with unified and coherent relationships.” While that offers a clear and succinct definition, it does not illustrate the many facets of organization within an educational context. In this study, as in an educational setting, organization will refer to the preparedness, neatness, and accountability of students not only with regard to their materials, but their assignments and activities as well. A very organized student will be one who always has the necessary materials for class, one whose materials and assignments are neatly stored and arranged in their desk and folders consistently, and one who makes regular use of his/her assignment notebook for the purpose of remembering and prioritizing tasks the student is accountable for.

Organizational Skills, though easily confused with organization, are actually the “techniques used by students to manage the materials needed for their schoolwork, manage their time when completing assignments and plan their actions to meet their learning goals” (NYU Study Center, 2003). These are the ways in which students can help themselves to be organized, to accomplish the things described under organization. Within the context of this project organizational skills refer to students using their assignment notebook on a regular basis and having it checked for accuracy to ensure it is being used correctly. Also, a weekly “desk dump” is an example of an organizational skill students can use to keep their desk organized consistently by getting rid of
unnecessary papers and materials or using the time to rearrange their materials neatly. Double-checking their backpacks against their assignment notebooks is another skill students can use to stay organized. Creating schedules and task maps, breaking long-term assignments into more manageable portions and tracking extra-curricular responsibilities along with academic ones are all organizational skills that students may use.

*Self-Determination Theory* is a general theory of human motivation based on three universal, innate and basic psychological needs (competence, autonomy and relatedness) whose fulfillment or lack thereof determines the degree to which a student will be able to achieve his/her highest potential for optimal functioning, behavioral change and personal growth/reflection (Deci & Ryan, 2000). Referred to as SDT, this is a theory that helps to tie organizational skills to the ultimate success students achieve as independent learners. It serves as the road map that leads us from organizational skills and their effect on student achievement (competence), self-efficacy (autonomy) and the student-teacher relationship (relatedness) to how those effects eventually promote or diminish a student’s potential to be self-motivated as illustrated in Figure 1. In effect, it is the linchpin between the organizational and motivational realms of education.

The *psychological needs* mentioned above are the three that the study refers to when it mentions psychological needs of students. The three basic psychological needs of competence, autonomy and relatedness are universal to all individuals regardless of age, social strata or cultural origin (Deci & Ryan, 2000). The degree to which these needs are fulfilled for students will be explored through questionnaires and interviews.
These responses will be compared to students’ organizational skill levels before and after intervention to determine whether a change in their organization will have prompted a change in their needs fulfillment and consequently their self-motivation.

The first need discussed is *competence*. The student’s perception of his/her ability to successfully engage in classroom content or activities is imperative to the educational process particularly with regard to motivation. A student feels competent when they have their materials ready and are ready with the information to answer questions and participate in instructional activities actively because of the knowledge they feel they have attained. This research supposes that most students cannot feel competent to the fullest degree if they are scrambling to find a pencil or an assignment when everyone else is ready to go.

*Autonomy* is a student’s perception of the degree to which his/her personal contributions/tendencies are desired and welcomed in the classroom environment. This perception, dictates how willing a student may be to offer authentic thoughts and opinions in the classroom. It is anticipated that students who feel their thoughts are valued and accepted are more inclined to think and act autonomously in the classroom.

Finally *relatedness* or the degree to which a student feels positively connected to and cared for by his/her teacher, classmates and/or parents/guardians round out the needs of a student within the classroom. A student who does not feel comfortable with his/her teacher or classmates may not feel competent or autonomous in the classroom. The goals of maximizing a student’s potential for self-motivation clearly depends on the maximum fulfillment of all three of these needs simultaneously.
As the ultimate goal to this project, **self-motivation** is the ability of a student/individual to place enough of a personal value on classroom tasks, assignments or activities for it to lead to self-endorsed interest, action, performance or behavior. In the context of this investigation a highly self-motivated student is one who is energetic and alert without being a distraction, focused, attentive and engaged with little need for prompting. The idea behind this project will be to examine how we might increase that ability for less motivated students through the teaching of organizational skills in the classroom.

**Scope, Limitations and Delimitations**

The scope of this study was limited to quantitative and qualitative data obtained from one classroom of fifth-grade students and their teacher in a suburban Chicago elementary school. Organized in the form of a case study, the research concentrated on only a small sample of fifth-graders, which may be considered a weakness in some instances. However, the purpose of using a small contained sample, in other ways lent itself to intensifying the richness of the data collected as well as decreasing the possibility that variation in teaching instruction, support and classroom organization would threaten the study’s validity.

Further threats to the study were limited by the elimination of dual relationships from the study which might have caused bias in the data collected from students. The researcher had no prior relationship with the students participating in the study. This helped to eliminate power over participants and expectation from their potential
responses as no one but the researcher would have access to their answers on questionnaires and interviews.

Though the study observed only one classroom in one school, the classroom composition was such that the diversity of the participants in that classroom represented a broad range of ethnic, socio-economic, and academic groups, extending the perspective the study provided.

**Significance of the Study**

“Research on the conditions that foster versus undermine positive human potentials have both theoretical import and practical significance because it can contribute not only to formal knowledge of the causes of human behavior but also to the design of social environments that optimize people’s development, performance, and well-being” (Deci & Ryan, 2000, p. 68). This study looked to add to this body of knowledge by examining the relationship between the organizational skills and tendencies of students and a student’s potential for being self-motivated. Guided by Deci and Ryan’s Self-Determination Theory which rests on the premise that students need certain basic psychological needs fulfilled before they can begin to progress toward self-motivation, this study chose to examine the question by focusing on how the needs of relatedness, autonomy and competence identified by Deci and Ryan, may fit into a cycle that starts with organizational skill and ends with self-motivation or external dependency. The following graphic representation illustrates the hypothesis that a student’s organizational skill may very well be a helpful indicator as to the child’s potential to be self-motivated in school. The hypothesis represented in Figure 1 below suggests that a
student’s organizational skills can impact a student’s initial academic performance either positively or negatively. It is expected then that initial academic performance, good or bad, will subsequently impact the student’s relationship with his/her teacher positively or negatively and the student’s own feelings of self-efficacy.

Figure 1. A Model for the Perpetuation of Self-Motivational Tendencies

Following this, the study supposes that a student’s level of self-efficacy in conjunction with the student’s perception of his/her relationship with the teacher will determine the student’s ability to be more or less self-motivated. Finally, the student’s ability to be self-motivated will ideally help to determine the student’s potential for future
academic performance be it better or worse than the initial academic performance as a result of the positive or negative influences encountered at each step of the chain. As a result of the student’s academic performance being influenced in the end either positively or negatively it is presumed that self-efficacy and the student/teacher relationship would be affected again, hence the loop creating a perpetual cycle that began initially with a student’s level of organizational skills.

This study has the potential to link organizational skills to the fulfillment of students’ psychological needs as put forth by SDT. It could provide guidance and direction for future curriculum programs concerned with building students into self-motivated and self-determined individuals. The goal of turning out motivated students is often an important one to achieve. “In the real world, motivation is highly valued because of its consequences: Motivation produces. It is therefore of preeminent concern to those in roles such as manager, teacher, religious leader, coach, health care provider and parent that involve mobilizing others to act” (Deci & Ryan, 2000). Should organization reveal itself through the course of this study as a characteristic conducive to making students feel more competent, more related to their surroundings and more autonomous in the classroom, in other words, more self-motivated, research offers that they will then have increased their “interest, excitement and confidence, which in turn is manifested both as enhanced performance, persistence and creativity (Deci & Ryan, 1991; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997) and as heightened vitality (Nix, Ryan, Manly, & Deci, 1999) self-esteem (Deci & Ryan, 1995), and general well-being (Ryan,
Deci, & Grolnick, 1995)” (Deci & Ryan, 2000). In effect being more organized would help some students lead better lives in the long run.

**Implications for Social Change**

Organization should and could easily be incorporated into everyday lessons and classroom activities to bring added support to the development of these skills in students. It could be argued that the issue is of significant importance as it lends itself to the opportunity for increased success not just in school but in life later on including career, family and recreation. Learning to be organized might lead some students to lose fewer assignments, to know where to find notes to study from and in turn lead to the possibility for higher achievement in school (Bakanus & Holley, 2004; Boller, 2008). Helping kids learn to organize their materials can later lead to helping them learn to organize their time, to help them get things done on schedule, to help them keep and excel at jobs later on and perhaps have enough time to enjoy hobbies and more leisurely activities. It could be said that understanding more about teaching kids to be organized can even lend itself to increasing the quality of life in the long run. Since it appears the issue of organization has the potential to effect so much more than just a child’s education the current study aimed at determining whether a relationship exists between students’ organizational skills/habits and their academic achievement and self-efficacy in school in relation to self-motivation. While there are studies which have examined the relationship between organization and academic performance (Orr, 1996) and others which have documented links between achievement and student self-efficacy (McLean, 1995) little is known
about the influence of organization on the combined effect of academic performance, student self-efficacy and student/teacher relatedness on student self-motivation.

This study focused on discovering how organization impacts self-motivation in students by examining how it impacts factors which influence the fulfillment of student’s basic psychological needs and as such, will help us to better understand the place of teaching and supporting organizational development of students in curriculum.

It was expected that the three data sets described here would provide a complete picture of the place of organizational skills in the lives of students with regard to each student’s ability to be self-motivated. It was the hope of the study that gaining some insight into this potential relationship might provide us with a tool to better serve our students as we prepare them for what lies ahead. If the relationship was found to exist as represented here, there could be strong implications for supporting the development of organizational skills of students within the school setting. Should the study suggest that the possibility of the represented relationship be a reality, it could serve to advance the education of our students far beyond the academic realm alone.

**Summary**

Finally, this study aimed at investigating the relationship, if any, between a student’s organizational skill and the student’s potential to be self-motivated. The study approached the issue by first illustrating how organization affects academic performance. Following that the study looked at how academic performance affects student self-efficacy and student/teacher relatedness and subsequently how the combination of the three, affects a student’s ability to self-motivate. These factors were chosen on the basis
that they represent the classroom manifestation of the three basic psychological needs that must be fulfilled according to SDT if intrinsic self-motivation is to be achieved. This study attempted to show how the fulfillment of these needs as represented in this study is ultimately affected by a student’s organizational ability. The findings in this study should be looked upon as a starting point to guiding students toward self-motivation within the classroom context as it aimed to increase our understanding of the impact of student’s organizational skills on factors that according to Self-Determination Theory determine how and why we are motivated.
CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

During the course of this study, the researcher examined the nature of the relationship between student organizational tendencies and student abilities to be self-motivated learners. In doing so, the investigation explored the perspectives of both students and their teacher concerning organizational skills in the classroom, as well as, research that can offer more insight as to the influences those skills may have on student performance and student needs with respect to self-motivation. This review of literature focuses on the three major elements of research: the perceptions and importance of organizational skills for teachers and students, the impact of organization on student psychological needs fulfillment, and the relationship between organization and student self-motivation. The scope of the research discussed is limited to the middle-school student with some exploration of adolescent age students for comparison and reference. The review of literature in this particular case helps to highlight a stronger understanding of the possibilities for increased student self-motivation through the teaching and support of student organizational tendencies many of which are specific to the proposed intervention of this research undertaking.
Organizational Skills

In reviewing much of the popular literature available on organizational skills, two issues have emerged which have helped to clarify why some students struggle with organization. The first of these is a discrepancy in students’ understandings of what organizational skills are and more notably, what kind of impact those skills can have (Gambill, Moss, & Vescogni, 2008; Monahan, Ognibene, & Torrisi, 2000; Orr, 1996; St. Laurent, 2009). The latter is what the research will refer to as the “old enough” assumption, which emerged repeatedly in the literature as an assumption made by teachers, particularly at the middle school level, which assumes that students at this stage of development are “old enough” to know how to organize themselves despite developmental and learning differences (Bakanus & Holley, 2004; Boller, 2008).

Between the two, an understanding of why and how students come to lack in organizational skills (Boller, 2008; Breeden, 2000; Gambill, Moss & Vescogni, 2008) begins to take shape.

The Discrepancy

In her study St. Laurent (2009) sets out in search of data that will reveal the perceptions of parents, students and teachers on student organization. Based in a setting very similar to that of this project, in her study St. Laurent explores fourth grade organizational strengths and weaknesses through surveys completed by 63 students and 58 parents. Survey data revealed that 77.6% of parents and 58.7% of students expressed a need for improvement of organizational skills, St. Laurent also reports on ten, one-on-one student interviews and four, one-on-one teacher interviews. The interviews provide a
much more detailed look at what needs to be done to improve organization in students. Between the teachers and the students we learn that over 40% of students do not use their assignment notebooks on a daily basis as they should, but that 71.4% felt that they were organized always or at least 2-3 times a week. The discrepancy between students being organized and feeling organized is revealed in interview responses provided by the students in comparison to those of the teachers. According to the interview results, student understandings of organization focused only on having the necessary materials and being able to keep those things neatly ordered in their desks. Students made no mention of assignment notebooks or the management of time, and only one student brought up turning assignments in on time as part of being organized. On the contrary, when asked to define organizational skills, three of the four teachers interviewed focused their attention on task completion, citing schedules and checklists as opposed to just materials. In fact, “most teachers, when asked to describe characteristics of model students, include traits such as planning, time management, self-monitoring, paying attention, and controlling behavior and emotions” (Boller, 2008, p. 169).

Further review of the related literature found evidence of this to be overwhelming as a vast majority of the studies on student organizational skills cited time management and planning/prioritization as critical elements of practical organizational skills (Anday-Porter, Henne & Horan, 2000; Gambill, Moss & Vescogni, 2008; Sedita, 1995). In 2000, Anday-Porter, Henne and Horan published a report of a program they developed for the improvement of student organizational skills. Their population, like St. Laurent’s, was very similar to the one used in this study. In all, it included a self-contained fourth grade
classroom, a sixth grade science class, and a high school learning disability classroom for
ninth through twelfth graders. Their program which implemented an intervention that
included role-playing, problem solving, teacher modeling, group activities and self-
evaluation was administered at a Midwestern suburban school also similar to the one in
this study. Though they chose to approach organizational skills improvement through
developmental factors, school structure and parental involvement the results were the
same. After combining the deficiencies of organizational skills demonstrated by students
in their population with strategies suggested by other researchers in their review of
literature, time management skills and prioritizing came out at the top of the list for
organizational goals, (Anday-Porter, Henne & Horan, 2000). “One crucial step in
becoming organized is learning how to manage time” say the authors and like St. Laurent
highlight that which is often missed by students in their assessment of organizational
skills.

Gambill, Moss and Vescogni (2008) offered added support for “the discrepancy”
as well as the impact of organization on issues that affect psychological needs in their
investigation of three separate public schools and the possible reasons behind low grades.
Their determination was that failing grades were a reflection of poor organizational skills,
beginning with the lack or misuse of student planners. Though students admitted that
“teachers frequently encourage the use of student planners on a daily basis with verbal
and visual clues,” and surveys indicated that many students used their planners on a daily
basis, teacher observation indicated otherwise, as well as discovering that most students
did not record any assignments for the entire first month of school (Gambill, Moss &
Vescogni, 2008). On a finer point, teachers in this study noted that “students appeared to look for guidance from teachers while answering the surveys, as if looking for adult approval” (Gambill, Moss & Vescogni, 2008) providing a strong indication that they are unaware of the right or wrong answer with regard to time management and as such just as unaware of the impact this element of organization may have on their success and achievement.

In this section St. Laurent and her many counterparts in the field of education helped to highlight some of the most important issues with regard to the teaching and learning of organizational skills for students. Their work made evident the discrepancy that exists between what students know and understand organizational skills to be. It clearly identifies that while students at this stage of development do have some understanding of organizational skills, that understanding is incomplete, making the need for further investigation and especially intervention focused on time management imperative to improving these skills.

The Assumption

Bakunas and Holley (2004) illustrate this clearly in their article on teaching organizational skills. They offered that to teach children organizational skills you must do so in two broad categories: organizing supplies (which the students already understood) and organizing behavior (which the students were unaware of). They insisted that students must learn both categories in order to reap the advantages of being organized and that when including these lessons in classroom activities, teachers should keep objectives clear and limited, as well as, age-appropriate, (Bakunas & Holley, 2004).
The framework for the intervention used in this study was based on two of their objectives, one from each category: (1) students will organize their desks, cleaning them on a weekly basis, (2) students will update assignment notebooks daily, in order to develop organizational habits “that will endure through their school years and even into their future careers,” (Bakunas & Holley, 2004, p. 93).

The fourth-graders in St. Laurent’s (2009) study knew only of the first objective and in large part did not use assignment notebooks as an organizational tool, part of the reason that this study has focused on maintaining assignment notebooks with more academically developed fifth-graders as assignment notebooks are the foundation for any organizational effort according to Bakunas and Holley (2004). Barbara Boller (2008), a school psychologist of more than a decade agrees. Middle school students certainly have some organizational abilities, but they are far from being the independent learners teachers hope for them to be. Like the others, she has said that providing just ten to fifteen minutes a day for students to write down assignments and organize paperwork can make a big impact.

However, teaching children to write assignments down may not be enough. “The transition to middle school is an educational milestone, marking significant and sometimes unspoken changes in expectations. The overriding expectation is that students will become more independent” (Boller, 2008). She would go on to say that many middle school teachers provide structure to students but forget to teach them how to “navigate the curves” on the road to independence. These curves, Boller reports, come in the form of an assumption made by many teachers that middle school students are “old
enough” to remember books and assignments and projects and materials for all their classes and responsibilities without nagging from parents and teachers. Her experience and heartfelt insight into the middle school setting have brought her to question this assumption:

By the time the day ends the homework log is full and we assume students understand what they need to do, but are they really “old enough” to tackle all these assignments alone. Do they realize that they need to look at their homework pad and map out a plan?... Do they have a sense of how long each assignment will take?... Do they know how to prioritize and allocate time and energy? (p. 170)

Based on neurological evidence of brain development, her answer is, no (Boller, 2008). Neurologically the processes involved in organizational skills are associated with the frontal lobe, the area of the brain which controls higher-level processes, otherwise known as executive functions. Executive functions control a plethora of skills, time management and self-monitoring among them.

From a neurological perspective, the frontal lobes are not fully developed until young adulthood, a developmental perspective that challenges our assumptions about ‘old enough’... We do not expect young readers to tackle a Harry Potter book independently until they have developed the necessary decoding and fluency skills. We should not expect our middle school students to manage themselves without external support until we are sure they have the skills they need. (pp. 170-171)

Like Boller, Sedita (1995), insists that “too often…we move children through the grades without sufficient tools or training.” In her extensive work spanning more than two decades she too has found support for the idea that:

from third to sixth grade, the emphasis switches to reading and writing to learn, and assumptions are made about how organized students should be at this point. In junior high school, students are expected to work more independently and to keep up with increasingly difficult schedules for school work, sports, activities and social commitments. Upon entering
high school and then college, even greater demands are placed on the student...The greater the demands of the grade level, the more need there is for study skills to cope with those demands. (p. 2)

Unfortunately, through no fault of their own, she says, but rather because of the assumption on the part of teachers and even parents that students have learned these skills in lower grades or on their own, students are left to face increasing responsibility with less and less instructional support in the organizational skills that might help them to manage these tasks successfully (Sedita, 1995). Though much of her work concentrates on the impact study skills can have on improving the academic and overall success of students with learning disabilities, she is quick to point out that all students can benefit from instruction in these skills (Sedita, 1995). In this essay, she presents a rationale for the teaching of study skills, in the form of a study skills model that has been presented to thousands of educators through workshops at the state and national level and which has been implemented in a number of schools on a system-wide basis. The model takes students from main idea, note taking and summarizing to textbook, test-preparation and test-taking skills, slowly building them up to bigger challenges and independent study. Most important to this study is that the first step in the model is organizational skills. Though she does not offer as scientific of an explanation as Boller (2008) does, Sedita (1995) explains from her extensive experience with students how “it is easy to assume that students, especially in the upper grades, have adequate organizational skills. Yet many students do not know what supplies they should bring to class, how to use an assignment pad, or how to determine how long it will take to complete an assignment,” (Sedita, p. 4). She makes it clear that this assumption has kept many parents and teachers
from teaching organizational skills to their children whether learning disabled or not, and that as such has limited the positive impact the learning of such skills can have on their academic and extra-curricular lives.

Sedita (1995) and Boller (2008) offer that having a better understanding of organization as a developmental process will help us to better understand the different skill levels of our students and in doing so provide insight into the organizational support necessary to help them on their way to independence. In short, their articles encapsulate the very essence of this project by acknowledging that providing students with organizational support at the appropriate developmental stage will move them along the path toward becoming self-motivated or as Boller puts it, independent learners. The experience and insight they and others illustrate in their work, both anecdotally and academically provided a strong and justifiable foundation for this research, as well as, a clear picture of the importance of organizational skills in the classroom setting.

**Psychological Needs and Self-Motivation**

While organizational skills have been framed by this study as the tools with which teachers may be able to help students achieve increased self-motivation, psychological needs will be the bridge that will ultimately help them to arrive at that goal (Deci & Ryan, 2000). As such it becomes difficult to separate the two concepts and doing so can only detract from the impact one has on the other. Much of the literature available reinforces the interrelatedness of psychological needs and self-motivation and in concert with what has already been discussed in regard to organizational skills begins to develop
a visible, even tangible framework for a relationship between organization and motivation, (Boller, 2008; Gambill, Moss & Vescogni, 2008; Orr, 1996).

In their essay on SDT, Deci and Ryan (2000) provide a comprehensive discussion of their theory, that three universal psychological needs – competence, relatedness and autonomy – and the fulfillment thereof influence the degree to which each of us can operate optimally as a self-motivated individual. They insist that regardless of class, age, origin or sex, each of us must have those needs fulfilled before we can achieve intrinsic motivation and ultimate well-being (Deci & Ryan, 2000). The idea that “research guided by self-determination theory has focused on the social-contextual conditions that can facilitate versus forestall the natural processes of self-motivation” (p. 68), encouraged its prevalence within the current research on organizational skills and their link to motivation and ultimate success whether in childhood or adult life. They are not shy about expressing the importance of self-motivation and the concepts that affect it. According to Deci and Ryan:

Motivation has been a central and perennial issue in the field of psychology, for it is the core of biological, cognitive, and social regulation. Perhaps more important, in the real world, motivation is highly valued because of its consequences: motivation produces. (p. 69)

The idea that motivation, or more specifically, self-motivation produces the success we achieve throughout our years speaks to the importance of fulfilling the psychological needs that lead us toward that self-motivation according to their work. Deci and Ryan (2000) highlight the fact that regardless of what it is each individual is trying to “produce,” self-motivation in its ability to “produce” is the success that brings us great athletes, dancers, artists, thinkers, doctors, policy makers, and philosophers, all
“producing” what it is they were intrinsically motivated to produce as a result of having had their needs for competence, relatedness and autonomy fulfilled throughout the course of their development. They specify the three psychological needs as “essential nutriments” and that “individuals cannot thrive without satisfying all of them” (p. 75).

The authors clearly equate self-motivation to the well-being of an individual and illustrate as their primary concern the investigation of conditions that support or detract from that, as this study aimed to do with organizational skills in students. They conclude that:

Knowledge concerning the nutriments essential for positive motivation and experience, and, in turn, for enhanced performance and well-being has broad significance. It is relevant to parents and educators concerned with cognitive and personality development because it speaks to the conditions that promote the assimilation of both information and behavioral regulations. It is also relevant to managers who want to facilitate motivation and commitment on the job, and it is relevant to psychotherapists and health professionals because motivation is perhaps the critical variable in producing maintained change.

With psychological needs at the forefront of increasing self-motivation investigating conditions like organizational skills and how they affect those psychological needs will inevitably help in building a better understanding of education and what it can do for students in the long run with respect to student motivation.

The investigation into psychological needs and how they link organizational skills to student motivation begins with a growing concern over student achievement or competence. Perhaps because grades are the outward-most expression of learning as we have come to experience it, many issues are not examined until “the grades” indicate a need to do so. As such in 2008 three teachers at three separate public schools began to analyze possible reasons behind low grades (Gambill, Moss & Vescogni, 2008). Upon
reviewing the existing literature they concluded that the factors which they determined were contributing to low student achievement, including late work, unprepared students and lax attitudes were due to a lack of organization among the students.

It became evident to the researchers that the lack of these organizational skills negatively impacted student academic achievement in the school setting. The researchers became gradually more aware of an increasing number of students receiving failing grades, and a declining number of students completing homework. Many students were observed to be unprepared for class, and some lacked basic school supplies needed to be successful in their classes. (p. 34)

As a result, the aim of their study became the improvement of student achievement through the use of an organizational skills curriculum. The study, like others, was successful in improving student achievement through the teaching of organizational skills (Gambill, Moss & Vescogni, 2008; Monahan, Ognibene & Torrisi, 2000). However, it is important to understand in the context of the current study, that student achievement or competence can impact more than grades alone. For this study competence serves as the link to the other psychological needs whose combined fulfillment may yield increased self-motivation in students.

In an investigation of “time-on task” levels of third graders, Ann L. Orr, supports what the previous authors showed organizational skills can do for the improvement of competence, but also moves us one step closer to understanding how increasing organization effects the potential for the fulfillment of the other two. Her project, which was experimental in nature, compared the call to lesson response times of thirds graders, before and after they had been exposed to an organizational skills intervention. In her review of literature she found that a great deal of student motivation had to do with time,
either how it was spent or how much of it was wasted. She cites earlier studies whose
“findings indicated that the time students spent organizing themselves had a stronger
relationship with course test scores than did total study time or time spent reviewing,”
(Orr, 1996, p. 6) once again reinforcing the benefits of organization to competence and
achievement. Orr insists that a lack of organizational skills contributed to wasted time
and confusion in the classroom, in turn, preventing “on-task” or motivated behaviors (as
student motivation in this study was also to be determined by how often a student must be
prompted to get and stay “on-task”) (Orr, 1996). Her own results showed a significant
improvement in the motivation of students (indicated by the decrease in call to task
times) after they had undergone some training in organizational skills. This coincided
with the observation that:

...those who do well in school are found to be more effective planners and
organizers. On-task students tend to demonstrate a relatively well
organized series of steps during task implementation. Students who are
off-task tend to show a poorly organized approach to task management
and are more hesitant and less deliberate during task performance than are
on-task students. (p. 8)

According to Orr (1996), the effect of organization on competence is clear. Those
students who are more organized are observed also to be more competent. Feelings of
competence being closely related to feelings of self-esteem in most individuals, have the
potential, if applied to the cycle of self-motivation presented in Figure 1 of this study, to
impact a student’s relatedness and autonomy in the classroom as well, ultimately
affecting their ability to be self-motivated. Orr agrees that “the effects of disorganization
range from student/teacher frustration (relatedness), to behavioral disruptions (autonomy)
to poor test performance (competence)” (p. 9), reflective of all three psychological needs.
She supports it with references to programs like “Study Buddies” and parent/teacher programs which depend a great deal on relatedness in the course of helping to improve motivation. Her own conclusions help to highlight the importance of psychological needs within the context of increasing student motivation, as well as, how organization plays a part in that. Of her eight conclusions, three directly reflect each of the psychological needs discussed by Deci and Ryan (2000) as imperative to the success of self-motivation within students.

The place of psychological needs in relation to student motivation is further highlighted by Johnmarshall Reeve (2006) in *The Elementary School Journal*. In his examination of motivation Reeve concentrates heavily on what the teacher must do to foster an “autonomy-supportive climate.” Reeve proposes that “one crucial ingredient within the supportive quality of the classroom is the teacher’s motivating style” (p. 225) and he focuses specifically on the teacher’s ability to create an environment for the students in which their needs for competence, relatedness and autonomy are of the utmost importance. Having clearly done extensive research of previous findings with regard to the positive effects to be gleaned from such an educational environment, Reeve provides a laundry list of studies offering evidence of that. He argues that:

…autonomy-supportive environments involve and nurture (rather than neglect and frustrate) students’ psychological needs, personal interests, and integrated values. Supporting these inner motivational resources is a worth-while undertaking because students in classrooms taught by autonomy-supportive teachers, experience an impressive and meaningful range of positive educational outcomes including greater perceived competence (Deci et al.,1981), higher mastery motivation (Ryan & Grolnick, 1986), enhanced creativity (Koestner, Ryan, Bernieri & Holt, 1984), a preference for optimal challenge over easy success (Shapira, 1976), increased conceptual understanding (Benware & Deci, 1984),
active and deeper information processing (Grolnick & Ryan, 1987),
greater engagement (Reeve, Jang, Carrell, Barch & Jeon, 2004), higher
intrinsic motivation (Reeve, Nix & Hamm, 2003), enhanced well-being
(Black & Deci, 2000), better academic performance (Boggiano, Flink,
Shields, Soelbach & Barrett, 1003), and academic persistence rather than
228)

It is difficult to argue with his extensive report of findings in support of this claim. From his review of past and current literature as well as his observation of teachers who are autonomy-supportive as he explains, Reeve’s (2006) aim is to produce a prescriptive list of things teachers should do and say in order to establish and maintain an environment conducive to increasing student self-motivation, and he insists that psychological needs and Self-Determination Theory are the key. He invites organization into the conversation when he talks about the structure teachers need to provide, carefully pointing out that to enhance motivation that structure must provide students with clear instructions and expectations along with freedom of choice, warning that an overwhelmingly controlling environment can only cause a student’s motivation and learning to suffer, contrary to those qualities thriving in a more autonomy-supportive environment that keeps students psychological needs in mind. Much of the same is to be said about what Reeves writes regarding, relatedness. He says “the more supportive teacher are, the more competent students feel, the more creative they are, the greater they feel in control of their learning, and the more engaged they are during learning activities (Koestner et al., 1984; Reeve, 1996; Ryan & Grolnick, 1986)” (Reeve, 2006, p. 233). His is an insightful list that puts SDT at the center of what every teacher should know about improving student motivation. His work provides much needed support for the notion
that when teachers teach using practices grounded in SDT and psychological needs, they create an environment in which the inner motivational resources of students are expanded instead of neglected. His work also lends justification to studies like this one, examining SDT and its more detailed components as “the autonomy-supportive style represents a prototype of the sort of interpersonal relationship that facilitates students’ autonomous motivation and classroom engagement. Though quite dense, it could easily be imagined that when translated into plain language the information that Reeve’s offers in his finding could prove to be a motivational resource for teachers striving to establish and maintain autonomy-supportive classrooms, which could lead to higher student motivation and participation, less stress in the classroom during the first few years and perhaps higher teacher retention. The implications of his work seem endless and a step toward a new horizon of educational training and preparation.

Researchers and theorists are not the only individuals to have come to this understanding. In an article on learner centered environments conducted by Daniels and Perry (2003), the students involved in their previous investigations helped to reinforce the importance of fulfilling psychological needs within education. Over the course of several years of preparation and several pilot tests of their investigation, the authors compiled a list of student “insights” from hundreds of elementary student interviews on their perspective of learner-centered principles. The article presents four “lessons from children” which bare a stunning resemblance to the three psychological needs Deci and Ryan (2000) insist must be fulfilled at every stage of life. Although their study was grounded in SDT, their work did not involve training students in the theory or motivation,
but rather exposing them to different educational environments. According to the
students themselves, they preferred the classrooms in which the teacher got to know them
as a unique person and learner (highlighting their need for relatedness), where they were
allowed to participate in interesting learning activities (for improving competence in
subject matter), where they could make their own choices sometimes (to fulfill their need
for autonomy), and where they could work with their classmates (as a platform for
competence and relatedness together). Without even knowing it, students, in their
interviews and through the observations collected, reflected their innate desire to have
their needs fulfilled by gravitating toward the kind of learner-centered environment that
could accomplish that. Daniels and Perry (2003) bring us one step closer to
understanding the practical impact of what Deci and Ryan (2000) offer in theory. Their
studies and their article illustrate some of the positive aspects of paying more attention to
psychological needs within the classroom including noted academic improvement and
increased intrinsic (self) motivation among students whose needs are met (Daniels &
Perry, 2003). More intrinsic motivation could mean less need for extrinsic coercion,
which as Hennessey (2001) points out may increase creativity and productivity in
students and adults alike.

Hennessey’s (2001) main hypothesis is that “the reduction of intrinsic interest in
young children (and perhaps all of us) is driven primarily by the learned expectations that
rewards are usually paired with activities that need to be done” (p. 294). She says that
“children may learn to react negatively to a task as ‘work’ when their behavior is
controlled by socially imposed factors (such as rewards), and they may react positively to
a task as ‘play’ when there are no constraints imposed (p. 294). In other words, she highlights the fact that children are not often rewarded for playing yet most often they are self-motivated to do so. The autonomy offered by the lack of constraints on play makes it more likely to be a self-motivated action, one whose reward is in the intrinsic value it represents to the individual doing it, as opposed to the contrary. In Hennessey’s work, as in Daniels and Perry’s (2003), the psychological needs of students and people take a central role in their ability to be self-motivated. She explains that children who have to be coerced are on the losing end of performance and creativity (Hennessey, 2001). As the literature discussed thus far points out, those needing to be coerced are those lacking in self-motivation (Daniels & Perry, 2003), and those lacking in self-motivation are lacking in psychological needs fulfillment (Deci & Ryan, 2000). Together they reinforce the importance of psychological needs and push researchers to find better ways of answering to those needs. Even so, Hennessey (2001) understands that schools cannot be solely based on needs. She does not ignore the reality that there are requirements which need to be met and assessed. She contends that “under certain conditions intrinsic and extrinsic motivation have been found to combine in a complimentary fashion” (p. 294). She enlists a series of studies, not just of children, and concludes that:

The important element here seems to be the preservation of a sense of self-determination…thus, evaluations or rewards that are perceived as useful and informative rather than as instruments of coercion can serve to increase involvement in the task at hand and should not be expected to have detrimental effects. (p. 295)

In doing so, Hennessey reminds the reader that evaluation and even reward can take place as long as it does so with the preservation of psychological needs in mind. She along
with her counterparts paints a clear picture of the prominence of psychological needs in self-motivation, and the impact self-motivation can have on the success of individuals. Together they reinforce the need to investigate issues like organizational skills that may impact needs fulfillment and many other things down the line.

Summary

Over the course of reviewing the literature involved with this study, we have seen the documented importance of organizational skills within the classroom. Organization has been deemed “a prerequisite for success... [that]…crosses all studies for higher education and all life situations” (Gambill, Moss, & Vescogni, 2008, p. 1). The teaching and/or improvement of organizational skills for students has also been shown to improve student performance and achievement (Monahan, Ognibene, & Torrisi, 2000; Orr, 1996). These researchers have agreed that organizational skills increase success and have shown data in support of that, but have not explained how or why this may be the case. Further review of the literature has shown that psychological needs may be the answer to those questions. Putting psychological needs at the forefront of education can improve achievement (or competence) and improving competence can only make it easier for students to participate in class and potentially strengthen relationships (relatedness) with peers and teachers (Daniels & Perry, 2003). Having stronger relationships and feeling more competent sets the foundation for more autonomous participation by individuals, (Deci & Ryan, 2000) and more self-motivated individuals at that. In the end the literature reveals what this study suspected, a cycle of growth that starts with certain characteristics like organizational skills and their influence on psychological needs and ends in
increased, self-motivation. It lends a great deal of support for the proposed focus of this study and others like it that look to examine conditions which may affect our ability to be optimally functioning human beings in the end.
CHAPTER III

RESEARCH METHODOLOGY

Nature of the Study

The research questions in this study focused on the impact of students’ organizational skills on their competence, relatedness and autonomy within the classroom and how their impact on those needs could ultimately affect their ability to be self-motivated. It looked closely at how organizational skills might improve the chances that students would feel competent, and related and autonomous, and by doing so would show how organizational skill can, in the end affect, self-motivation as well. The study investigated the influence of organizational skills on those psychological needs by documenting changes in student perceptions of the fulfillment of those needs prior to and following an organizational skills treatment intervention designed by the researcher. This mixed methods case study employed a quasi-experimental pretest-posttest design using concurrent triangulation during both the data collection phase and the data analysis phase. As such the study examined a purposeful sample of one fifth grade suburban public school classroom in which the teacher had provided little to no guidance or instruction on organizational skills prior to this inquiry in order to diminish the effects that instructional support might have on the results of the study.
Research Design

This case study looked to extend its reach by including both qualitative and quantitative sources of data. Along with surveys and lists the study collected interview data, as well as photographs and photocopies of students’ desks and notebooks, in an effort to create a complete picture of the research environment being studied.

Data Sources

The quantitative portion of this investigation included a teacher categorization sheet, which placed students into one of three groups according to their current level of self-motivation as defined by the study. Students were asked to complete an initial questionnaire as part of the quantitative data collection process on their understanding of what organization is and how it impacts their function in class. The teacher and students were asked to complete similar instruments once again at the end of treatment as a posttest measure.

The qualitative portion of the study included a teacher interview and student interviews based on open-ended questions aimed at understanding student perceptions of organization, its importance in the classroom, its impact on the fulfillment of student psychological needs and their subsequent influence on student self-motivation. Other qualitative data included photographs of students’ desks and copies of pages from their assignment notebooks as documentation of organizational skills to be compared to their self-motivational tendencies as reported by the teacher and as observed through classroom observation by the researcher.
To make sense of the data collected in this pretest-posttest case study, concurrent triangulation was employed to help combine the qualitative and quantitative portions of the study. The study provides several pieces of data through quantitative surveys and lists as well as qualitative interviews, photographs and observations, which when triangulated within the same context produced a richly detailed and varied account of how organizational skills impact a student’s ability to be self-motivated. Analysis of the categorization sheet completed by the teacher helped to identify the initial motivational levels of students, which provided a point of comparison for their initially observed organizational skills as shown by desk photographs and their own perception of their psychological needs as communicated through the first round of interviews with the sample set of students. The interviews and photographs together would help to reinforce the findings of the quantitative survey data by providing a deeper account of student feelings and perceptions with regard to the same. The same instruments employed subsequent to treatment intervention helped to highlight the influence if any that improving organizational skills might have had on student needs and as a result student self-motivation.
Setting and Sample

The participants in this research study were the students in one suburban Chicago public school fifth grade classroom. The elementary school in which the class was located had a total student population of 562 students. The school represented a relatively diverse student population within which 48.8% of the students were white, 3% were black, 20.8% were Hispanic, 23% were Asian/Pacific Islander, and 4.4% were multiracial. The scores for the Illinois Standards Achievement Test (ISAT) indicated that at the fifth grade level 80% of the students were achieving at or above their grade level in reading and 85.4% were doing so in Math. The school’s attendance rate was 95.4%. The researcher had the opportunity to conduct a pilot study of a similar nature at this site and found that it was ideal for the focus of the study.

It was expected that the fifth grade class to be chosen for the current study would contain 20-25 students. The researcher chose to conduct her investigation in a fifth grade classroom at this school because of complaints from teachers about student organization and motivation and especially because these students would have to change classroom’s for different subjects beginning in sixth grade, making fifth grade an ideal setting for examining and perhaps improving on the organizational habits that may increase self-motivation and potentially future success. The elementary class chosen was a purposeful sample due to the researcher’s knowledge that the classroom teacher currently provided little to no support of organizational skills to the students, diminishing the potential for such instruction to interfere with the proposed intervention and the research results.
The study examined the class as a whole using both quantitative and qualitative instruments, but also reexamined a random sample within the class to give more depth to the general information gleaned from the study. Between pretest questionnaires and interviews and posttest questionnaires and interviews the teacher helped to introduce an organizational skills intervention. Prior to any data collection, the teacher was provided with all of the materials necessary and trained to be able to administer the proposed intervention. The researcher and the teacher worked together to develop the most efficient system for accomplishing and verifying daily notebook checks. The intervention was administered to all the participants and included a desk checklist, a daily assignment notebook check, and a weekly desk clean-up. Pictures of students’ desks and observations were taken throughout. Each bit of data whether quantitative or qualitative worked to reinforce one or two other pieces of data in an effort to create an intricate web of information strong enough to support the findings of the study in the end.

Data Collection

This study was based on simultaneous and concurrent collection of both quantitative and qualitative data. The data collection process lasted a total of ten weeks allowing for completion of all questionnaires and interviews whilst providing an ample amount of time for intervention and thorough photographic and observational data to be compiled throughout.

The data collection process began with initial photographs of students’ desks and classroom observations. Through careful observation of students and their desks, the researcher used a rubric to identify the current organizational levels of the students in the
class. Following that, the researcher concentrated on establishing an understanding of how the students viewed their school experience with special attention to their feelings about their competence, relatedness and autonomy within the classroom. This was accomplished both at the beginning and the end of the study through the use of slightly differentiated questionnaires that were administered to all the students.

After this first phase of observation and surveys had been completed, the researcher asked the teacher to complete a categorization sheet where she placed each student into one of the following three groups: poorly self-motivated, moderately self-motivated, and highly self-motivated. The teacher placed each student into a category based on their energy, attentiveness/disruptiveness, constructive engagement, and need for prompting. Once students had been categorized a random sample of 5 students was taken from each category by placing all the names in each category into a corresponding brown paper bag and drawing five names from each bag leaving us with a sample of 15 students within the target classroom for the purpose of student interviews, while the entire class participated in all organizational instructional activities associated with the study as well as any surveys and questionnaires.

The more qualitative spectrum of this examination included a 15 minute semi-structured one-on-one interview with each student from the sample set before and after treatment, which helped to provide a more detailed snapshot of students’ understanding of organization as well as its impact on their perspectives of school and motivation. The interviews were focused on learning what students think organization is and how it impacts their lives, particularly with regard to school. Interview questions were rooted in
discovering whether or not students felt their psychological needs were being met. The opinions of students on their achievement, their relationships with their teacher and classmates and their attitude toward school in general were analyzed in order to highlight whether more organized students felt more comfortable, competent and adept to performing in their classroom environment.

An organizational skills intervention was administered between questionnaires to promote both knowledge on the issue and actual skill among students, so that students might provide insight as to what is helpful and what is not with regard to improving self-motivation through the teaching of organizational skills. Each student received a checklist for their desk of things to double check before they left school for the day. Intermittent lessons on organization provided students opportunities to practice different organizational concepts like making lists, prioritizing tasks, and managing time/resources. Also each student was required to have their assignment notebook checked and stamped by the teacher/class monitor for a period of six weeks to ensure students were using the notebooks to improve organizational skills. Finally the teacher allowed 10-15 at the end of each week for students to clean out and reorganize the material in their desks. The treatment began at the end of week two once initial observations, photos, surveys and interviews had been completed. It ended after week eight. During the final two weeks of the study students were expected to maintain these tendencies without supervision. Photos of desks and copies of assignment notebooks at the end of week ten indicated how much of their organizational skill they had maintained.
To reaffirm the findings gleaned from students, the second round of questionnaires and interviews, to be administered at the end of week nine, helped highlight whether talking about and teaching organizational skills in school had had any effect on their actual organizational skill and subsequently their self-motivation. Accompanying the interviews and the questionnaires were the photographs of the students’ desks as documentation of learned and maintained organizational skills to be compared to changes in attitude and motivation that was represented by comparison of pretest and posttest data as evidence of the influence organizational skills may have on motivation.

Validity

There were two types of considerations that were made in this study with regard to validity, those regarding content validity and those meant to protect the internal validity of the research study. The nature of the study and the data collection procedures used in the study were susceptible to a number of threats to validity. The following measures were taken to counteract those threats and limit the effect they might have had the data collected and its analyses.

The instruments used in this study were developed by the researcher in order to collect data on student organizational skills and their effect on student self-motivation. To ensure the content validity of the research, the researcher conducted a pilot of this research study in its entirety as part of a previous class project. The pilot lasted a total eight weeks and included preliminary versions of all of the methods to be used in the actual study. This afforded the researcher the opportunity to administer the instruments
intended for data collection and to determine whether or not they in fact provided data on that which she had intended to measure. After discussing the results with the classroom teacher, as well as her supervising professor, revisions to the instruments and alterations to the research protocol were made to the pilot study, which are reflected in the current study.

There were several threats to the internal validity of this study that needed to be addressed as well. Selection, history, maturation, and testing were all issues that needed to be considered in constructing this study so that it could maintain its internal validity. Several precautions were taken specifically to counteract these threats and prevent the reporting of a false effect.

Selection or “systematic differences in respondent characteristics that could cause the observed effect” (Shadish, Cook & Campbell, 2002, p. 55), were counteracted by categorizing the students by their self-motivational tendencies and comparing them within and then across categories. The threat of “events occurring concurrently with treatment” (p. 55), that could cause the observed effect or history, were minimized by intentionally choosing a classroom in which the teacher provided little to no support or instruction to students for organizational skills development. This helped to ensure that the treatment provided by the study would measure for its own effects and not those of another program or external instruction. “Naturally occurring changes over time that can be confused with treatment effect” (p. 55), otherwise known as maturation can pose a threat in studies that take place over an extended period of time. As such the researcher carefully selected a timeframe for the study that would allow for the collection of rich
and detailed data, but not be so long as to allow for significant maturation to occur. Finally, testing, which is when “exposure to a test can affect scores on subsequent exposures to that test” (p. 55), and once again be confused as a treatment effect, was a primary concern in this study as a result of its pretest-posttest design. To limit the effects testing might have on the internal validity, the questionnaires provided to students pre- and post-treatment differed slightly in wording to give the illusion of different instruments while maintaining identical content.

A similar study on organizational strengths and weaknesses of fourth graders, written by Michelle J. St. Laurent, Ed.D., in 2009 stated that it is recommended that researchers use at least two verification strategies to ensure the validity of qualitative data. Aside from the considerations made above, several other verifications were imposed to help ensure the validity of this study. One of the strategies used was peer validation. As Steinar Kvale and Svend Brinkmann (2009) define it, peer validation involves presenting the researcher’s interpretations to peers among researchers for discussion about their validity. As such the qualitative data from this study including transcripts from interviews will be reviewed by a peer in academic research to ensure validity.

As a result of some of the similarities between the two studies, that of the fourth graders and this one, the last two verification strategies to be used were the same in both studies. Triangulation which involves combining several different types of data, including observations, photographs, questionnaire results, and interview transcripts in order to draw out different themes highlighted by the study would combine the
qualitative and quantitative portions of the study to produce cohesive answers to the research questions.

Thick description, the final verification strategy involved not only providing important detail, but rather describing a social action thickly so as to “begin to interpret it by recording the circumstances, meanings, intentions, strategies motivations, and so on that characterize a particular episode” (Scwandt, 2007, p. 296). By providing a rich thick description of each portion of the study the researcher made it easier for the reader to make comparisons to actual classroom situations, specific students, or their general educational setting.

Data Analysis

This study used mainly data triangulation to analyze the data collected from observations, charts, photographs, questionnaires and interviews. In doing so the data analysis provided a complete picture of how organizational skills influenced student self-motivation in the classroom by cross-examining student perceptions of organization with their actual organizational ability and their feelings about their school achievement as well as how they felt it might be improving or detracting from other factors in school, most importantly, their competence, relatedness and autonomy within the classroom. If questionnaires and interviews showed that students felt more positive about their needs post-intervention, that indicated organizational skills had helped improve the fulfillment of needs necessary for the improvement of self-motivation according to SDT, and thus showed the influence organizational skills can potentially have on motivation.
**Quantitative Data**

In order to address the research questions, data collected from the initial student questionnaires/surveys were analyzed using a frequency table created by SPSS through a test on descriptive statistics. The frequency tables were provided for the class as a whole as well as for each of the motivational categories so that comparisons of perceptions of organization and of psychological needs fulfillment could be made across groups. The categorization list provided by the teacher also helped to determine how realistic student responses on the questionnaires were and to help identify possible misperceptions as well. The first questionnaires provided a baseline or point of comparison for results of a similar questionnaire that was completed post-treatment. The posttest was analyzed identically. Concurrently, a paired sample $t$-test, appropriate for studies involving repeated measures and intervention, was conducted through SPSS to identify whether or not a difference in means exists between measures. Comparison of the pretest and posttest results provided insight as to what changes might have occurred in the target perceptions both for the group as a whole and categorically, which helped to highlight which students’ self-motivation did and can benefit most from organizational skills support within the classroom.

**Qualitative Data**

Student interviews looked to address both research questions by concentrating on identifying students’ perceptions of how their psychological needs are being fulfilled within the classroom, their perceptions of organizational skills, and their thoughts on how organizational skills affect the fulfillment of those needs. Field notes and audio
recordings of the interviews were used to collect the data and subsequently each interview was transcribed and coded by the researcher to be used in analysis. Codes concentrated on students’ understandings of what organization is, perceptions of their own organizational skills, perceptions of their self-motivation (feelings of competence, relatedness and autonomy in the classroom), benefits and malices of being organized, and improvements they felt they had made with regard to organizational skills and/or self-motivation. The codes aimed at drawing out themes that support a relationship between better organization and stronger self-motivation in students. Other data from the qualitative portion of this study were documented and analyzed by comparison. A general improvement in the condition of students desks from week to week and from beginning to end would help support questionnaire and interview results should they have also indicated an improvement/increase in psychological needs fulfillment or otherwise, self-motivational potential. Likewise, increased or more consistent use of assignment notebooks by comparison of weeks prior added another element of support and helped to elaborate on the findings of the quantitative portion of the study.
CHAPTER IV
PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this mixed methods pre-/post-test study was to examine the potential relationship that may exist between students’ organizational skills and their ability to be self-motivated learners/individuals. The initial goal of this research was to discover whether or not there exists a relationship between a student’s organizational skills and his/her motivation. Guided by the following research questions: how do students’ organizational skills influence self-motivation and how do organizational skills influence student competence, relatedness and autonomy, the research explored this inquiry by building a better understanding of how organizational skills affect the competence, relatedness and autonomy of students, the same psychological needs that according to Deci and Ryan (2000), determine the ability of an individual to be self-motivated. In order to do so, the research focused on creating an intervention that might first improve organizational skills among the students taking part in the study in order to subsequently be able to document any changes the students may display in terms of their psychological needs fulfillment. A positive change in the fulfillment of psychological needs among students whose organization did in fact improve would indicate that the improvement of organizational skills may also help improve student motivation.
Procedure

The research for this study was conducted over the course of ten weeks in a public suburban Chicago fifth grade classroom. Twenty-three fifth graders participated in the study which began with the researcher observing the class for two weeks. In order to create a baseline of information for comparison post-intervention, during the first two weeks, the researcher also had the students complete a questionnaire regarding organization and psychological needs fulfillment (see Appendix E), took pictures of their desks to document their organizational skills level pre-intervention, and photocopied pages from each student’s assignment notebook (see Appendix G) to document their tendency to use it, also pre-intervention. The researcher then asked the teacher to categorize the students according to their current level of motivation, using the criteria and categorization chart which appears as Appendix M. The teacher placed each student into a category based on their energy, attentiveness/disruptiveness, constructive engagement, and need for prompting. With the students categorized as highly motivated, moderately motivated and poorly motivated, the researcher then placed the names from each motivational category into a separate bag and randomly selected five students from each motivational group to interview one-on-one, once before and once after they had completed the proposed organizational intervention. Once the students had been chosen the researcher completed an interview with each of the fifteen students as well as with the classroom teacher.

The prescribed intervention lasted six weeks starting at the beginning of week three and ending at the end of week eight. During week six, in order to document student
progress, the researcher once again took pictures of the students’ desks and photocopied a number of pages from their assignment notebooks, rating them using the rubric in Appendix G. The same was done at the end of week ten to provide the final or post-intervention rating for each student. During week ten the students also completed their post-intervention questionnaire and their post-intervention interviews. The teacher also completed her second interview at that time, which brought the research portion of the study to an end.

The data collected during these ten weeks are presented here in a series of charts, comparing the organizational skills ratings across groups and across time. They are presented to the reader in the same way they were collected: pre-intervention, mid-intervention and post-intervention. The pre-intervention data include results from observations, motivational ratings, organizational ratings, questionnaires, and student/teacher interviews, as well as a one-way ANOVA analysis run to determine whether or not there was a significant difference in group organizational means pre-intervention. The mid-intervention data provide observations and organizational ratings, as well as a one-way ANOVA comparison of means across groups. Finally the post-intervention data report on observations, organizational ratings, post-intervention questionnaires, and post-intervention student/teacher interviews, including a paired sample t-test to determine improvement within groups across time (pre-test/post-test) and a one-way ANOVA analysis to compare differences across groups at specific intervals. Subsequently, the discussion section provides an expanded interpretation of what the results revealed about organization and motivation while the summary offers a
comprehensive look at what can be gleaned from these findings in terms of improving motivation through curriculum.

**Pre-Intervention Results**

**Pre-Intervention Observations**

*Classroom Organization.* In the weeks leading up to the organizational skills intervention being implemented in the classroom, it was the goal of the researcher to get a feel, through classroom observation, of the current organizational and motivational climate in the class. During initial observations completed between September 13th and September 17th it was observed that the room itself appeared organized in many ways. Field notes documented that the room had been “fixed up for a fresh start to a new school year,” “colorfully decorated” for “new students with new supplies,” and that “every student had been required to purchase a multi-tab expanding folder to be able to file-away their work in one location.” It was also reported in the researcher’s field notes that “the teacher had placed a box in the middle of each table group containing extra pencils, pens and other everyday supplies to reduce the time some students spent fumbling for these things in an effort to increase listening.” Despite these observed attempts at increasing the general organization of the classroom, notes of these observations also indicated that “students did not receive their assignment notebooks until September 10th, three weeks into the school year.” The field notes report that “on the day the books finally arrived, they were passed out to the students as they were leaving for the day with no discussion as to how to use such a tool effectively, even though the students were very enthusiastic about finally receiving them.” The researcher noted that “the excitement the students had
shown for their new organizational tool was misdirected, bearing more resemblance to
‘Friday chaos’ than enthusiasm that could be harnessed as an organizational teaching
opportunity.”

Even so, early reports documented prior to intervention found that efforts to
establish an organized classroom were initially successful, so much so that the researcher
reported on 9/17 that “the study may need to be restructured for observation during the
second semester to allow students to show areas that need improvement.” This sentiment
diminished by 9/29 when the desks and the class were observed to be “visibly
deteriorating with regard to organization,” with “papers beginning to stray despite filing
folders available.” By the end of week two field notes indicated that despite the teacher’s
early attempts to help keep the students organized with file folders and communal
supplies, the students were starting to show their true organizational and motivational
tendencies. “The condition of the desks is slowly beginning to deteriorate with papers
beginning to stray and some students having more supplies surrounding their desks than
in them, while other students are managing their things quite nicely.”

Challenges. While the first observations most readily allowed for physical
inspection of the classroom and the students, later observations began to uncover some of
the classroom challenges that a lack of organization could impose. Despite the teacher’s
attempts at collective organization for the class, observations recorded showed there were
students who were overwhelmingly disruptive to themselves, their classmates and the
teacher. Field notes recorded on 9/24 during a class session in the computer lab began to
highlight some of these issues. The students were in the lab completing the technological
portion of a group project. “Two students are observed doing group work with an ELL student who has been more engaged than they have despite his inability to speak English.” “Another student who has been observed to be very motivated and very organized has been grouped with two students and has clearly had to take charge of the project on her own. She is basically working by herself while her two partners chit chat.” A third student who has been observed to be extremely unorganized “is simply all over the place, distracting with questions and conversations irrelevant to the task at hand.” By 10/1, the researcher notes that “the same students catch attention over and over as a result of their inability to sit still, remain on task, and concentrate.” There are a number of students who stray off topic easily and one student is often confused what the topic is having been too busy doing something else. Consequently “many of the students who are acting up and appear distracted are also losing control of their supplies. One of these students is actually dancing around the room right now.” “The more organized students seem to be better behaved for the most part, though there are a few who seem organized but still cannot concentrate.” These observations recorded between 9/13 and 10/1, provided a baseline for student organization as they began to delineate which students were organized and which were not, as well as documenting their individual behaviors reflecting on their motivation as well in some way.

**Pre-Intervention Teacher Categorization**

Toward the middle of week two, the teacher was asked to complete a categorization sheet identifying which students she thought were highly motivated, moderately motivated and poorly motivated. Her list split the class into three nearly
perfect groups with the highly motivated group containing nine students, the moderately motivated group containing seven students and the poorly motivated group also containing seven students. However, the sample population included a much larger number of girls (16) than it did boys (7) and though the study did not analyze the data in relation to student sex, it found that of the boys, 42.86% found themselves part of the poorly motivated group while 43.75% of the girls were categorized as highly motivated. Even so, because of the fact that boys were so heavily outnumbered comparisons within motivational groups would have appeared skewed and irrelevant as both girls and boys were relatively evenly distributed across groups according to each of their available populations except for a very slight predominance of girls in the highly motivated group.

In any case, these data sets were unknown to the researcher prior to the initial observations documented above yet bore a startling relationship to what was observed, strengthening the validity of the observations reported.

**Pre-Intervention Organizational Ratings**

The organizational ratings of students were determined by a scoring rubric developed by the researcher to be able to assess the organization displayed by each student’s desk and the frequency and quality of their use of their assignment notebooks. The rating scales as seen in Appendix M were developed by the researcher and provided a streamline process for creating numerical data that would yield group means for comparison. Each student received a score from 1 to 3 for the organization of their desk, 1 being the worst or unorganized, 2 being somewhat organized, and 3 being the best or very organized. Similarly each student also received a score for how often and how well
he/she used his/her assignment notebook. Table 1 displays the pre-intervention organizational ratings for students deemed highly motivated.

Table 1

*Highly Motivated Student Organizational Ratings Pre-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>J</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>S</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>V</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>W</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>X</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Y</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Z</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

| TOTAL   | 25          | 21              | 23                     |
| MEAN    | 2.77        | 2.33            | 2.55                   |

According to these findings, the students who were identified as being the highly motivated students in the class had a mean average desk organization rating of 2.77 on a scale of 3. The same group’s assignment notebook rating average was 2.33 which was much lower, though still above average and caused their overall organizational average to come out to 2.55, lower than their desk rating but still relatively high on the scale provided. As can be seen, most of the highly motivated students received a rating of 3 (very organized) for their desk organization with only two students of the nine receiving a 2 (somewhat organized) and no students receiving a rating of 1 (unorganized). The notebook ratings for this group are more modest with four students keeping very good track (3), four students being somewhat organized about it (2), and only one student not
having used his/her notebook at all. Overall, the highly motivated group was found to be very organized even before intervention and especially in comparison to the moderately and poorly motivated groups as reported below.

Table 2

*Moderately Motivated Student Organizational Ratings Pre-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>I</td>
<td>2</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>K</td>
<td>1</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>L</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>T</td>
<td>1</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>U</td>
<td>1</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>MEAN</td>
<td>1.85</td>
<td>1.57</td>
<td>1.71</td>
</tr>
</tbody>
</table>

Table 3

*Poorly Motivated Student Organizational Ratings Pre-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>O</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Q</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>10</td>
<td>11.5</td>
</tr>
<tr>
<td>MEAN</td>
<td>1.85</td>
<td>1.43</td>
<td>1.64</td>
</tr>
</tbody>
</table>
The moderately motivated students and the poorly motivated students were found to have very low and very similar mean organizational ratings. Each of the groups yielded a mean desk organization average of 1.85. The assignment notebook rating for the moderately motivated students (1.57) was only slightly higher than the poorly motivated students (1.43). Their overall averages turned out to be 1.71 for those moderately motivated and 1.64 for the poorly motivated students on a scale of 3, falling below the middle marker of 2 (somewhat organized). As can be seen in the tables both groups had a much lower frequency of 3 scores than had appeared in the highly motivated group and a much higher frequency of 1s. To gain a better understanding of what these result might mean in terms of organization and its relationship to motivation the researcher chose to conduct a one-way ANOVA analysis using SPSS. Ideal for analyzing data in experimental studies, quasi-experimental studies and field studies, the one-way ANOVA allows a researcher to compare the means of 2 or more groups at a time (Green & Salkind, 2007, p. 183). Figure 2 provides the output of the analysis conducted.
### Tests of Between-Subjects Effects

**Dependent Variable:** OrgAvg1

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>3.877&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2</td>
<td>1.939</td>
<td>7.633</td>
<td>.003</td>
<td>.433</td>
</tr>
<tr>
<td>Intercept</td>
<td>90.241</td>
<td>1</td>
<td>90.241</td>
<td>355.323</td>
<td>.000</td>
<td>.947</td>
</tr>
<tr>
<td>MotCat1</td>
<td>3.877</td>
<td>2</td>
<td>1.939</td>
<td>7.633</td>
<td>.003</td>
<td>.433</td>
</tr>
<tr>
<td>Error</td>
<td>5.079</td>
<td>20</td>
<td>.254</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.000</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>8.957</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> R Squared = .433 (Adjusted R Squared = .376)

### Multiple Comparisons

**OrgAvg1**

**Tukey HSD**

<table>
<thead>
<tr>
<th>(I) MotCat1</th>
<th>(J) MotCat1</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly Motivated</td>
<td>Moderately Motivated</td>
<td>.0000</td>
<td>.26937</td>
<td>1.000</td>
<td>-.6815</td>
<td>.6815</td>
</tr>
<tr>
<td>Moderately Motivated</td>
<td>Highly Motivated</td>
<td>-.8413&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.25397</td>
<td>.009</td>
<td>-1.4838</td>
<td>-.1987</td>
</tr>
<tr>
<td>Moderately Motivated</td>
<td>Poorly Motivated</td>
<td>.0000</td>
<td>.26937</td>
<td>1.000</td>
<td>-.6815</td>
<td>.6815</td>
</tr>
<tr>
<td>Moderately Motivated</td>
<td>Highly Motivated</td>
<td>-.8413&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.25397</td>
<td>.009</td>
<td>-1.4838</td>
<td>-.1987</td>
</tr>
<tr>
<td>Highly Motivated</td>
<td>Poorly Motivated</td>
<td>.8413&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.25397</td>
<td>.009</td>
<td>.1987</td>
<td>1.4838</td>
</tr>
<tr>
<td>Highly Motivated</td>
<td>Moderately Motivated</td>
<td>.8413&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.25397</td>
<td>.009</td>
<td>.1987</td>
<td>1.4838</td>
</tr>
</tbody>
</table>

Based on observed means.

The error term is Mean Square(Error) = .254.

<sup>*</sup> The mean difference is significant at the .05 level.

*Figure 2.* One-Way ANOVA Analysis Output for Pre-Intervention Organization Means Comparison
This analysis essentially tests whether or not there exists a statistically significant difference in the means between the three groups. The test starts out by assuming that there is no difference between the organizational means of the three groups: the highly motivated students, the moderately motivated students and the poorly motivated students. The p-value is what determines the significance. A p-value above .05 would indicate that the assumption was correct and that there is no significant difference in the organizational tendencies of the students in the different motivational groups. A p-value below .05 would indicate that there is a statistically significant difference between 1 or 2 or all of the groups. The p-value in this case as shown in the first half of the output was .003, indicating of course that there did exist a significant difference in organizational scores/tendencies, somewhere among these three groups at this point in time. To determine where the difference occurred a Tukey Post-Hoc test was conducted to reveal that pre-intervention, there was a statistically significant difference in the organizational tendencies between the highly motivated students and the moderately motivated students and again between the highly motivated students and the poorly motivated students. In other words, it was found that there was a significant difference in the level of organization of highly motivated students and all others, suggesting that there is some type of connection between a student’s organizational skills and his/her motivation as the level of organization associated with highly motivated students was significantly different than the level of organization associated with the moderately and poorly motivated students.
Pre-Intervention Student Questionnaires

To know more specifically the effect of this organizational difference on individual student motivation, students were asked to complete questionnaires aimed at identifying how being organized or unorganized made them feel with regard to issues reflecting their competence, relatedness and autonomy within the class. The pre-intervention questionnaire (see Appendix E) asked students to rate their own organization, to express how important they thought organization was and to mark off how they felt when they were not organized from a list of 12 choices. Below Tables 4, 5 and 6 show the results of the pre-intervention student questionnaires by motivational group.

Table 4

Highly Motivated Student Questionnaire Results Pre-Intervention

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>Organizational Self-Rating</th>
<th>Importance of Organization Rating</th>
<th>Should Organization be Taught 1-Yes 0-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>S</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>V</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>W</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>X</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Y</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Z</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.22</td>
<td>2.66</td>
<td>1</td>
</tr>
</tbody>
</table>
Interestingly, the responses to the questionnaires revealed somewhat of a discrepancy in the way students viewed themselves with regard to their organization. As the means show, both the moderately motivated students (mean = 2.57) and the poorly
motivated students (mean = 2.43) indicated that they thought they were actually more
organized than the highly motivated students (mean = 2.22) thought they were at the
beginning of the study. All three groups thought that organization was very important
and resulted in the same average for that response (about 2.7 on a scale of 3). The
discrepancy between the groups picked up again with student responses on whether or
not organization should be taught in school. The highly motivated group, who was
obviously also the most organized of the three groups had an average of 1, meaning that
all the students in the group agreed that organizational skills should be taught in school.
The moderately motivated students and the poorly motivated students both had an
average of .86 for this response, showing that one student in each of those groups thought
that organization should not be taught to students.

To further help identify a relationship between organization and motivation, item
4 on the questionnaire asked students to check off different feelings in order to complete
the statement “When I feel like I am not organized and not prepared for class I feel…”
The choices, along with the responses of each group and the class as a whole are
displayed in Table 7 below.

As the table shows, the most common responses to this item were discomfort,
confusion, needing help, and even being quiet regardless of which motivational group the
student belonged to. Students across all three motivational groups noted more frequently
that feeling unorganized would negatively affect their feelings of competence, relatedness
and autonomy as it would induce feeling uncomfortable, confused, like they needed help
and even like they should keep quiet. Within the framework of SDT these responses
draw a clear association between organization and the psychological needs the theory insists must be fulfilled for self-motivation to improve.

Table 7

*Question #4 Response Analysis Pre-Intervention*

<table>
<thead>
<tr>
<th>Item Checked</th>
<th>Highly Motivated Students Responded</th>
<th>Moderately Motivated Students Responded</th>
<th>Poorly Motivated Students Responded</th>
<th>Total Class Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like I know what I am doing</td>
<td></td>
<td></td>
<td>1(5.6%)</td>
<td>1(2%)</td>
</tr>
<tr>
<td>Like I can work on my own</td>
<td></td>
<td></td>
<td>1(5.6%)</td>
<td>1(2%)</td>
</tr>
<tr>
<td>Like I can answer questions</td>
<td></td>
<td></td>
<td>1(5.6%)</td>
<td>1(2%)</td>
</tr>
<tr>
<td>No different than before</td>
<td>1(5.3%)</td>
<td></td>
<td></td>
<td>1(2%)</td>
</tr>
<tr>
<td>Comfortable talking to people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like I should keep quiet</td>
<td>1(5.3%)</td>
<td>2(18.4%)</td>
<td>2(11%)</td>
<td>5(11%)</td>
</tr>
<tr>
<td>Like I get more work done</td>
<td>2(10.5%)</td>
<td></td>
<td>1(5.6%)</td>
<td>3(6%)</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>4(21.1%)</td>
<td>3(27.2%)</td>
<td>5(27%)</td>
<td>12(25%)</td>
</tr>
<tr>
<td>Like I can help others</td>
<td></td>
<td></td>
<td>1(5.6)</td>
<td>1(2%)</td>
</tr>
<tr>
<td>Confused</td>
<td>5(26.3%)</td>
<td>3(27.2%)</td>
<td>3(17%)</td>
<td>11(23%)</td>
</tr>
<tr>
<td>Like I need help</td>
<td>5(26.3%)</td>
<td>3(27.2%)</td>
<td>3(17%)</td>
<td>11(23%)</td>
</tr>
<tr>
<td>Ready to work</td>
<td>1(5.2%)</td>
<td></td>
<td></td>
<td>1(2%)</td>
</tr>
<tr>
<td>Total N of Responses</td>
<td>19 (39.6%)</td>
<td>11 (22.9%)</td>
<td>18 (37.5%)</td>
<td>48 (100%)</td>
</tr>
</tbody>
</table>
Pre-Intervention Interviews

In order to delve deeper into the information already provided by observations and student questionnaires, this study employed a series of pre- and post-intervention interviews that would help to provide greater detail to the examination of student organization and how it impacts their motivation. Upon interviewing the five randomly selected students from each of the three groups the researcher utilized an interview guide (see Appendix H) to help bring structure to the interviews. Questions focused on understanding what students knew and thought about organization in general, as well as their own organization, its importance and impact on school life and achievement, and in turn motivation. Each student was interviewed for about 10 minutes. The researcher took notes during the interviews and then reviewed each audio recording in order to make her notes entirely complete. This naturally led to the discovery of themes which are represented here through a summarization of student responses to each question.

Question 1: What does being organized mean to you? The main purpose of this question was to expose the level of organizational knowledge each student possessed in order to be able to make comparisons across motivational groups that could be paralleled with motivational tendencies later. Students in the highly motivated group answered that neatness was an overwhelming part of being organized, as it applied to their desks, lockers and even their writing in some instances. Some of them talked about having a place for things and all five of them mentioned the importance of organization in making things easy to find by allowing them to keep their “supplies neat and ready to go.” When asked to expand on what kinds of things you need in order to be organized, one student
answered, “like shelving in a closet,” and another “categorizing to find things easily to be able to listen when you’re supposed to be listening.” In similar fashion, two other students respectively offered that an accordion folder with tabs for labels helps with organization, and that developing a color-coding/labeling system for notebooks and folders would help keep those items more organized. The fifth student suggested “keeping notebooks and folders in neat piles to have them ready to go.” Each of the five highly motivated students provided a detailed version of what is needed to be organized, demonstrating a theme of elevated organization in this group. This was a common trend with the highly motivated students. In general, these students were able to provide much more elaborate responses to this question much more frequently than their less motivated classmates. They were able to carry on a short discussion about organization with less prompting for more specific examples than were any of the other students.

When asked whether organization was important as an extension of this question and why, students answered that being organized helps you “find things and know what to do next,” “be less forgetful,” “save time and be better at school,” “know where things are not to have trouble,” and “not miss out on games or getting a good grade.” Their responses reflected a connection between being organized and doing well, staying out of trouble or being rewarded. All five students answered that it was important, and four out of the five highly motivated students made a connection between organization and achievement. This group provided the generalization that being organized had a positive impact on their school experience that resonated through their other responses moreso than any of the other groups.
Moderately motivated students were much more general in their answers to this question. They understood organization as “having things in order,” “having spirals on one side of the desk and books on the other side,” “taking notes” “having everything in your desk, not having a messy desk, having a clean locker, nice room.” Their ideas of organization revolved for the most part around separating notebooks and spirals to keep their desks organized with fewer more detailed descriptions of organization that could compare to the examples the highly motivated students had provided. Of the five, four students responded that organization was keeping a clean desk, with one student mentioning also organizing her clothes at home “in your closet, knowing what to wear instead of going in the morning,” demonstrating an ability to plan ahead somewhat, though not to the degree of highly motivated students.

Though their answers provided a less detailed account of organization in most instances, when asked about the importance of organization their answers were more similar to the highly motivated group. Students offered that organization was important because it helps “if there’s a project or assignment that’s due and you don’t know where you put it you might get a late homework,” helps you “learn better and…it just like feels better… happy, excited, ready for school.” They said being organized allows you to “have notes,” “be on time” and that it “makes life easier, faster, and like more efficient and stuff.” Like with the highly motivated students, all five moderately motivated participants thought that organization was important. In general their responses showed that this group also understood how organization might have a positive impact on their school experiences. Their answers made it clear that they had as good an understanding
of organization as the highly motivated students but were having more trouble executing it.

Answers from poorly motivated students to question #1 hinged on two words—“clean” and “messy.” These students offered that being organized meant that “you have a neat desk not a messy desk.” Being organized allowed you “to be more organized to find things easier, if it’s not organized than you won’t find things so much easier” “to find things like important papers,” and meant “cleaning up, not keep things on the floor.” The five poorly motivated students all added separating notebooks and folders as their definition of what being organized is. While the moderately motivated students were able to offer some differentiation as far as organizational techniques this group was not able to do the same. In general their definition of organization was based on finding things or not losing things.

This definition translated itself to the importance of organization for this group as well. From their conversations it was clear that to this group organization was important because it made things “easier to find,” not in order to be able to move further ahead as the highly motivated group or even the moderately motivated group suggested in some cases, but rather to avoid the repercussions of missing assignments. They thought it was important to be organized to “not loose homework,” “not forget things” and to “keep stuff together to have everything for home because not to get a referral.” Their discussion was more generally based on the repercussions of not being organized in contrast to the other two groups whose answers were generalized by a discussion of the
advantages of being organized. There was a clear negative influence on this group’s understanding of the importance of organization.

*Question 2: Would you describe yourself as organized or unorganized?* Question two of the interview guide was used in order to determine the accuracy of student responses to question one of the student questionnaires, as well as to establish an understanding of how each motivational group viewed itself with regard to their organization in order to discover any discrepancies that may have occurred among the different responses. Responses to this question and its sub-questions were more direct including mostly “yes, no and kind of” responses. As such, of the highly motivated participants two felt sure that they were organized one stating that “I only write a little messy when I am in a hurry” and the other explaining neither her desk nor her locker were messy. The three other students in this group felt they were “kind of” organized. One student offered that she is “in between because I have not a perfect desk but not messy,” and another that “sometimes there is not enough time” to organize his things. This was reflective of the responses they gave on the student questionnaire. These students generally did not forget things they needed for school and did not have to ask other students for supplies. When asked about their assignment notebooks, two responded that they did not really use them, two responded that they used them all the time, and one said she didn’t usually use it but made notes on sticky memos to remember what she needed to do. In general, the responses for this group were mixed, even though their observed organization was quite good. Their responses were also more honest and
accurate when compared for consistency with answers on the questionnaires and observed organizational ratings than were the responses of the other two groups.

In comparison, two of the five moderately motivated students felt they were organized (though one according to the research rating was not) and three of the five felt they were “kind-of” organized as did the highly motivated group. While the highly motivated group did not have very much trouble speaking up with confidence, two of the students in this group were particularly reserved and soft-spoken, even in a one-on-one setting. Of these students, four out of the five mentioned forgetting something at some point. With regard to assignment notebooks, three of these students said that they used them only “sometimes when there was a lot of homework” assigned but usually forgot and two said that they used the notebooks everyday.

The poorly motivated students provided some interesting information here. Three out of the five admitted to being “messy” and one thought she was still “kind of” organized, even though their self-ratings did not indicate this honestly. Two offered that they are very organized, which according to the ratings they were but only as far as their desks were concerned. They were constantly distracted in class and these two students in particular seemed to have learned the principles of organization without having attached any real value to them. They are interesting outliers and perhaps it is because of them that the poorly motivated group rated similarly to the moderately motivated group in organization. In any case, only one of these students reported using his/her assignment notebook, they all forget things, and one is excessively absent. By the end of this
question, four of the five students in this group have already become distracted with two becoming restless and the other two side-tracking to another topic.

All three groups with regard to assignment notebook use specifically, only when asked, reported sporadic use of the notebook even though organizational ratings indicated that the highly motivated students did in fact have the best tendency toward using this tool. Even so, these interviews indicated a general class consensus that recording and tracking assignments was not a significant part of their organizational understanding or process and would later explain why the assignment notebook portion of the intervention imposed during the study would have the most significant effect on student organization.

Question 3: How do you like school? What do you like most/least? What things are frustrating/difficult? Do you ask for help/help others? For highly motivated students school is “fine,” “good,” they “like” school. There is not a great deal that the highly motivated group found frustrating about school. A subject here and there, “social studies is boring” or “math is frustrating” or “nothing really” were mentioned, but otherwise all of these students seemed to like school just fine. This resonated in their comfort level with regard to asking for help or helping others. One student answered that he helps “others with math” and another that she asks “for help all the time” that she is “not shy” and that she “likes” to help her classmates because it makes her feel “proud.” Another, more soft-spoken member of this group agreed. None of these students mentioned having any reservations about asking for help from their teacher or classmates, though most of them did not talk about asking for help but more about offering help to others. All of them said that they offer help to their fellow classmates and four out of five
reported feeling proud in some way when doing so. It was obvious from their willingness to help others and ask for help themselves that all of these students readily participated in class. Even the student who was slightly soft-spoken, was observed to answer questions and offer comments on a regular basis. As such, strong relatedness and competence are themes for this group. Their demeanor for the most part was straight-forward and matter-of-factual. There was a sureness communicated in their tone and all of their responses showed a certain level of competence, continuing the connections between organization and student motivation as all five are very well organized.

The moderately motivated students seemed to be more divided than the previous group in their responses to this question. Responses regarding liking school ranged from “yes, because to learn,” to “so-so, but I like it,” to “good” to “I like seeing my friends.” Things these students liked included “specials, math and recess,” “art and math because it is interesting and fun,” “the projects and the fun,” and “writing because I am good at getting laughs with stories.” Responses including “fun” activities were much more frequent for this group than the previous one though in general this group responded positively about their feelings toward school even though their academic frustrations were higher than those of the highly motivated group as evidenced by answers like “math is hard because it takes a lot of effort,” or “math is hard because I am not that good at it.” The words “hard” and “frustrating” appeared more often for this group where the word “boring” was more common for the previous one indicating that greater competence in subject areas made some subjects boring for highly motivated students while lower competence for moderately motivated students made those subjects difficult.
Their tendency to ask or offer help was reflective of these strengths and frustrations. One student was “comfortable with everyone,” and “asks all the time” when help is needed, another asks “but not much, just to catch up I ask the teacher,” one doesn’t ask at all she says and another, in whispers, expressed that she is very shy about it and would have a hard time doing so. In comparison to their highly motivated counterparts who rarely expressed any reservation with regard to asking for help three out of five in this group it appeared would have some trouble doing so, unless it was something very difficult with which they really needed assistance. The other two are more social than the others naturally and perhaps showed a heightened sense of relatedness because of natural inclinations to do so. One of the three who had diminished relatedness was very organized but naturally very reserved and perhaps has had her motivation misinterpreted by the teacher as a result of her low relatedness. Interestingly, in comparison to the highly motivated students who did not mention learning as something they like about school, perhaps because it came more naturally to them, three out of the five moderately motivated students talked about liking school because they can learn there. It appeared as though they felt they did not know as much as other students and answered in this way as a compensation for that, as though they could know as much if they had more time. It seemed to speak in some way to their feelings of competence, as though they could be better. In connection to that, these students do participate in class, but were observed to be less accurate in their answers than students in the highly motivated group, adding to the notion that their competence is lower and combined with
their lower organizational ratings builds the case for how organization may impact motivation through its impact on our psychological needs.

The first part of question three drew an interesting array of responses from the most poorly motivated group of students. One student thought it was “fun” but “so-so with friends,” while another was very enthusiastic because he has “a lot of friends and you make new friends because that’s important and to learn.” Other answers included “fun,” “the subjects are interesting” and one student even responded that it “depends what school.” The general consensus was that school is just something they have to get through each day except for the one student who was very happy to be there. This student was also the only student in this group whose answer referenced learning in any way. Unlike the highly motivated students who felt generally great about school and the moderately motivated students who feel good and fine about it, the poorly motivated students are less than thrilled. Two of the students talked specifically about issues having to do with their peer relations which were having a negative effect on their demeanor otherwise. The issues involved teasing with the one student and bullying with the other. Only the student that was being teased admitted that it was her, the other student projected his situation as though it had happened to a friend of his, but his attempt was clearly transparent. There was a great deal of looking everywhere but at the researcher during the majority of these interviews, even the more positive ones. A lot of fidgeting and wiggling took place in the seats and it seemed as though the interview could not get done fast enough.
When asked about frustrations the word “boring” made a reappearance in these answers as it had with the highly motivated group. Social studies is frustrating “cause it’s boring” say most of the students and though boredom is not limited to that subject it is a common denominator among their frustrations. Three out of the five students found something “boring” about school, however with this group the response may have been employed more as a defense mechanism for low achievement than an actual sentiment toward the subject.

When asked like the other groups about their tendency to ask for help or offer help the first student answers “not shy” about asking though her response is directed more at the teacher than her classmates. Other responses included “sometimes I’m not the most comfortable asking,” “not shy to ask teacher or classmates,” and “I ask the teacher but not my friends.” One student diverts to talking about a bullying situation here and then continues into a story about how he ran for treasurer and lost. Even so, the consensus among these students was that none of them were very shy about asking their teacher for help though opinions were more varied in regard to asking classmates. This made more sense later when the teacher admitted to “being a softie” of sorts to the kids that really needed the extra help.

During the interviews all five of these participants appeared forthcoming and talkative, but closer observation revealed that they were so much so, that it was in fact more forced than anything else and their participation often distracting as opposed to constructive. It appeared in the classroom setting as though they were lacking so much in competence and autonomy that they were trying to compensate for that by fabricating an
increased sense of relatedness by speaking out of turn or out of context. All except one of these students were observed to be socially outcast in some way causing them to have to force themselves in.

Question 4: How do you feel when you are in school? How often are you trying your best? How are you doing in school/grades? Does that make you try more/less? How is your participation? How do you feel about your participation/how do you think your teacher feels about it? This question was specifically aimed at uncovering student feelings about their motivation without actually asking the question. It was to help highlight their motivational tendencies through a discussion of how they personally feel in school as opposed to about school (question #3) and to determine how their feelings about achievement were effecting their relatedness in terms of participation and their motivation in terms of giving up or trying harder. Students in the highly motivated group stated that they either felt “excited,” “happy,” “part of the group” and sometimes “tired” when asked about how they felt in school. These students answered that “I mostly try my best for every subject,” and “I always try my best because I like it to be a little challenging.” One student talked about being happy with her grades but that she “could step it up a bit,” while another was happy having received “all E’s” another student similarly mentioning that he was “not happy with M’s”, and one even mentioned she would be unhappy if she ever did receive a low grade.

None of these students mentioned not trying; and one student expanded on her statement by talking about how doing well at something makes her feel “like trying something harder after that.” These students most frequently answered that they attempt
to answer questions even when they are unsure of the answer. Their desire to do better regardless of success or failure when combined with the confidence that most of these students exuded when being interviewed and when being observed participating or answering questions in class was a clear demarcation that their success was fueling their desire for further success, motivating them if you will to continue to excel. Their desire for a somewhat challenging environment in particular set them apart from the others. In general their feelings in school were positive in nature and demonstrated their abilities to motivate themselves.

Of the moderately motivated students, some were “happy and cheerful” or “excited for recess,” and at times some felt “tired at the beginning” and even “lazy in the morning.” “Good” and “pretty good” were the most frequent responses to how these students felt about their grades. One student “kind of want(s) to try harder” but when asked how often he participates said “not really except for things I know.” Similar responses followed when students were asked how they felt about their participation and what they thought their teacher felt about it, “not sure…maybe sometimes distracting because I’m talking,” “she likes me but to participate more,” “not sure if she thinks I am doing my best,” and “good.”

Three out of five of these students admitted to refraining from participation in class or answering questions unless they were sure of the answer while a fourth also leaned in this direction but was observed volunteering answers even when unsure in some instances. Four out of five of the moderately motivated students felt they could be doing better in school with three stating in some way that time/scheduling was keeping them
from excelling while the other two, coincidently, more reserved students, felt they could be doing better in school if they studied more. Likewise, three of them showed similar uncertainty with regard to what they thought their teacher thought of their effort only one being sure that he had made his best impression.

The answers to this questions communicated scattered feelings of competence within the group which were also reflected in their answers regarding their relationship with the teacher. One student felt that relationship was okay while two others were not sure if the teacher thought they were trying their best. The last two students in this group were not sure altogether of the status of their student/teacher relationship with one of them suggesting that he may come off as distracting sometimes. There appeared to be a much more accurate awareness of their psychological needs than of their organizational skills which were somewhat skewed as mentioned earlier with this group. The effect of the organizational skills intervention as shown by post-intervention self-ratings would be of particular interest with regard to this element of the study and will be discussed later in the chapter once those results are presented.

The group of poorly motivated students provided even more depth to the relationship being examined. One student, who was particularly unorganized, stated that she felt “clumsy,” and “upset” in school and like she was “just sitting there when I forget things” sometimes. She also responded that she keeps trying in order “not to fall even further behind” and that her participation was “ok and then not okay, sometimes too much.” Another student in this group talked about how he was “happy everyday, goofing off and stuff.” The same student answered that “most things could be better” when asked
about his grades and answered that he thought his teacher was “happy” about his participation but that he thought he could “act a little better, by like raising my hand actually more.” There were mixed responses to how they thought their teacher felt about them with about half the group feeling comfortable and the other half feeling as though the teacher was aware of their lack of effort. One student talked about feeling like the teacher thought her participation was “not that good, cause she loves us, she wants us to try harder,” while another talked in detail about how he doesn’t participate “because the other kids are smarter” and the “the teacher never picks on me”, in his opinion because she thinks he “is stupid.” He explained how he would participate more in class if he felt she thought otherwise, once again bringing feelings of competence and relatedness to the forefront of motivation. The same student answered that he was trying his best “only when it’s really important.”

For the most part these student responses indicated an awareness of their lower achievement. Their responses created a clear connection between diminished competence and relatedness to decreased motivation. The most common responses carried a tone of uncertainty and that things in school like grades and participation were good but could be better. All of these students expressed that they would like to get good grades and that they think they could do better, however, none of them expressed any clear disappointment with their current grades, almost as though better grades would be nice, but that they were not going to go out of their way to have a shot at them.

**Question 5: What helps you to feel good/better about school?** This question was aimed at discovering what types of things teachers and students in a classroom do to
make each other feel good or bad in the school environment. What it revealed was the
different types of encouragement students at different levels of motivation need in order
to remain positive in the learning environment. Highly motivated students offered that
they felt best about school when “I can ask for help,” “people say I am smart,” when “I
get my homework done early,” “getting picked” to be a helper or a leader and “a little
jealous” when they don’t get picked all the time.

For this group, the answers to question five focused mostly on two things, doing
well and being recognized whether through compliments from teachers and classmates or
by being chosen to serve as a leader in classroom activities. Their answers also carry an
academic concentration and that being recognized for their achievements is key to
pushing their motivation to continue on the same level. All five of the highly motivated
students displayed a degree of confidence different from the other groups. There was an
underlying seriousness about the task at hand throughout the interviews. Their responses
communicated that getting things done early or first makes them feel good, as does
getting good grades and being recognized by their teacher or peers for their
accomplishments. There is a clear tendency among them toward leadership in the
classroom, with the majority of the students mentioning feeling proud when they can help
their fellow students and one student even joking about feeling jealous when she is not
called on enough to help others and in turn be recognized. These students view praise
and recognition not as a momentary reward but as a motivational tool that pushes them to
continue to do the things that allow them to receive the recognition that comes along with
that level of motivation on a regular basis.
Unlike their highly motivated counterparts, the moderately motivated group responded to this question somewhat differently. Two of the students, the more reserved ones in fact, took the responsibility of feeling better upon themselves, stating that “studying more at home” would help them to feel better in school. The others touched on encouragement as a motivating factor, though not to be confused with the praise highly motivated students desired. These students felt best in school when “students are not so confident that they know better than you and the teachers are nice, they don’t put you down” or when they say things like “not give up,” “when kids help,” when “asking others to know I can get help” and “when students behavior is accepting.” There was a distinct difference in the compliments that highly motivated students liked to hear and the more modest phrases of acceptance moderately motivated students desired. These student responses were most frequently linked to reinforcement and acceptance especially with regard to their moderate academic achievement in contrast to recognition. Their main point was that the best classroom was a “no put-down zone.” The three students who brought these suggestions also talked about being able to ask for help not to be left out and such, while the two more reserved students once again thought they could feel better about school by studying more perhaps to know more when in class and to increase their participation though neither expanded their answer to that degree.

Students in the poorly motivated group offered another layer to the study with their responses to this question. One student offered that getting “E’s and A’s so I can get a reward” would make him feel better in school. Another stated that “when friends say ‘good job’” to him or that he is a “good student” he feels good in school but that
“sometimes teasing” doesn’t make him feel good, that it doesn’t happen any more “but in fourth grade it did.” One student likes “when if it’s wrong, then be…say like ‘good try’…but sometimes they say ‘okay you’re wrong’ and just go on to another person” for wrong answers and another also mentioned that playful teasing from the teacher encourages her.

Mostly this group offered that encouragement was the key to maintaining some form of positive feeling in school. The poorly motivated group in answering question 5 provided the study with its first mention of actual rewards for good work or good behavior, consequently the lowest form of motivation discussed by Deci and Ryan (2000), and by the two most distracted/distracting students no less. Also for the first time, there is the emergence of negative repercussions to poor achievement which are obviously effecting the motivation of these students. Three of them talk about how not being teased would make them feel happier in school one of which is the student who says he doesn’t bother raising his hand because he knows the teacher won’t pick him because she thinks he’s stupid. They want to hear things from others that make them “feel” smart, the thought of which made a couple of them smile. Clearly they all want to feel a part of the class, but feel that the means to that come along the lines of not being singled out for wrong answers as opposed to being recognized for something good. This speaks volumes to their motivation especially because their teacher is quite accepting and does well to reinforce them anyway. It highlighted the fact that perhaps their competence had been so squandered that even being in an accepting environment was not enough to maintain what little motivation there was among them.
Pre-Intervention Teacher Interview

As with the 15 randomly selected students, an interview was also conducted with the classroom teacher both before and after intervention. The purpose of conducting the teacher interview was two-fold; to provide insight regarding the class as a whole, the students, current organization and motivation, etc., but also to provide a point of comparison to what the students reported and what the researcher observed/recorded throughout the study in order to ensure that the data carried with it a certain level of validity.

In the pre-intervention interview guided by Appendix J the teacher was able to provide a general overview of her classroom and the atmosphere in it regarding organization and motivation. She defined organization in terms of “assignments get placed in assignment notebooks, papers go in their folders…their desks are orderly, their lockers are orderly.” She noted, according to her expectations for organization that the general level of organization in her classroom was mixed. According to the teacher “a third (of the students) are super organized and a third...need improvement, and the rest are semi-.” She stated that as far as support for organization, assignment notebooks were provided by the school to each student and 10-15 minutes were given at the end of each day for them to be filled out and so that the students could gather their materials to go home. The only extended measure of organizational support was that some students had to have their assignment notebooks monitored by teachers/parents.

With regard to the classroom atmosphere, the teacher described it as a “warm, friendly, open” environment, and that “students feel comfortable to ask questions.” She
supported this with the fact that she employs “homework passes” to help decrease anxiety over forgotten homework, but that those passes have to be earned. She definitely thought that there were certain students who constantly needed monitoring and when asked how an increase in organization might change the atmosphere, her answers were focused on organization helping to reinforce a “set schedule so that students know what is to be expected” which would perhaps help to clarify expectations for students in her opinion. When asked if increasing organization could help improve participation she felt that “students that do participate are the students that always do and I don’t necessarily think it has too much to do with being organized, it may have some because obviously students who are not prepared are students who are not going to participate, but you also have to take into consideration there’s students who are just not outgoing.”

In describing her relationships with her students, warmth and friendliness are two big themes. She expanded by saying that “in general I try to have an even relationship with all my students, but I do tend to give a kind heart to the students who need me most,” describing herself as a “softie” of sorts, allowing for extra excuses and giving extra chances to the students who seem to need a great deal more in terms of support in school because they don’t get it at home. When asked how she thought the other students felt about this, her answer indicated that acceptance was the general response as “she plays many different roles for many different students.”

In talking about the highlights and lowlights of student motivation in her classroom, this teacher clearly felt that motivation could be better. “Unfortunately I think a lot of our students don’t have the parents at home that are on top of them, that are
making sure their assignments are getting checked, making sure they do have homework, or ‘what else can we do.’” According to her, the most influential factor on student motivation was a lack of parent participation due to many of her students coming from two-income households that just “don’t have the time to invest in their child’s education.” In terms of the current level of motivation among her students she said, “I think they could probably be more challenged if it was reinforced by both the parent and the teacher.” She felt that as far as improving motivation, differentiated instruction might play an important role as teaching students in three or four different ways may help to decrease frustration as it relates to increasing competence through learning. She also felt that improving reading would benefit the students’ motivation and that with frustration down students would “be more in tune to learn new concepts.”

**Mid-Intervention Results**

**Mid-Intervention Observations**

Having begun intervention the week of October 11th, in week 3 of the project after initial observations and ratings had been made, mid-intervention observations and ratings were collected November 5th at end of week 4 of the 6-week intervention. For four weeks at this point students had had daily exposure to their desk list reminder, monitoring of their daily assignment notebook use and weekly desk clean-up activity. During the first week of intervention, October 11th through the 15th, there was an immediate shift in the visible organizational skills of most of the students in the classroom. Observation revealed that roughly 75% of the desks were looking fairly well kept and students were observed asking questions about and looking ahead to what was coming up next. Over
the course of weeks 1-4 of the intervention (October 11th-November 5th), only four students were repeatedly given warnings for being distracting to the class or not having kept up with their organizational responsibilities. These students received reprimands 3-5 times an observation period either because they were off-task or actually doing something to distract someone else. Three out of the four students belonged to the poorly motivated group of students, the fourth having been categorized as moderately motivated. During an observation session on October 22nd one of these students was observed dancing around the room aimlessly while the other students were working and during a subsequent observation two of these students from the poorly motivated group had to be reprimanded during a test.

Regardless, otherwise there seemed to be more order to the way things functioned in the classroom and a noted increase in participation for students who were previously observed to be much more withdrawn in this regard. Classroom activities such as moving from desk work to sitting on the floor for reading were recorded as much less chaotic during this observation period than they had been observed to be in the weeks prior to intervention. There was also a noted improvement in the observation of assignment notebook use. By weeks 3 and 4 of the intervention, the researcher was able to record that the students were observed showing a high level of enthusiasm for keeping up with stamping their assignment notebooks as was evidenced on a number of occasions by questions from students about how long they could keep the stamps monitoring their assignment notebooks and their eagerness to have their notebook stamps verified by the researcher at the end of each week. As such, overall the intervention appeared at this
point, to have increased the level of consciousness regarding organization and organizational skills among students and expanded that knowledge to include assignment notebooks/time management. Small improvements in motivation were noted by increased participation observed by the researcher, mostly for students in the moderately and poorly motivated subsets. The highly motivated students remained as focused and productive as prior to intervention though even their organization was showing signs of improvement.

*Mid-Intervention Student Organizational Ratings*

During week 6 of the study (week 3 of the intervention) students were once again assessed on their organizational skills. Each student was again given a rating according to the provided rubric in order to identify by comparison to the pre-intervention measures, what types of changes occurred with regard to student organization as a result of the imposed intervention. Tables 8, 9 and 10 below display the results of the mid-intervention organizational ratings for the highly motivated, moderately motivated and poorly motivated student groups respectively.
### Table 8

*Highly Motivated Student Organizational Ratings Mid-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
<th>CHANGE IN AVERAGE FROM PRE-INTERVENTION TO MID-INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+0.5</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+1</td>
</tr>
<tr>
<td>J</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+1</td>
</tr>
<tr>
<td>V</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+0.5</td>
</tr>
<tr>
<td>W</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>X</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Y</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td>Z</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+0.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>26</strong></td>
<td><strong>27</strong></td>
<td><strong>26.5</strong></td>
<td><strong>+3.5</strong></td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td><strong>2.88</strong></td>
<td><strong>3</strong></td>
<td><strong>2.94</strong></td>
<td><strong>+0.38</strong></td>
</tr>
</tbody>
</table>

### Table 9

*Moderately Motivated Student Organizational Ratings Mid-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
<th>CHANGE IN AVERAGE FROM PRE-INTERVENTION TO MID-INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+0.5</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
<td>+1</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>+0.5</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
<td>+1</td>
</tr>
<tr>
<td>L</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+1</td>
</tr>
<tr>
<td>T</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>+0.5</td>
</tr>
<tr>
<td>U</td>
<td>1</td>
<td>2</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
<td><strong>20</strong></td>
<td><strong>16.5</strong></td>
<td><strong>+4.5</strong></td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td><strong>1.85</strong></td>
<td><strong>2.85</strong></td>
<td><strong>2.35</strong></td>
<td><strong>+0.64</strong></td>
</tr>
</tbody>
</table>
Table 10

Poorly Motivated Student Organizational Ratings Mid-Intervention

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
<th>CHANGE IN AVERAGE FROM PRE-INTERVENTION TO MID-INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>+1.5</td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+0.5</td>
</tr>
<tr>
<td>M</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
<td>+1.5</td>
</tr>
<tr>
<td>N</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
<td>+0.5</td>
</tr>
<tr>
<td>O</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+0.5</td>
</tr>
<tr>
<td>Q</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+1</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
<td>18</td>
<td>17.5</td>
<td>+5.5</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.42</td>
<td>2.57</td>
<td>2.5</td>
<td>+0.78</td>
</tr>
</tbody>
</table>

As the results indicate, the highly motivated students were still found to be the most organized with regard to their desks (mean = 2.88) their notebooks (mean = 3) and their overall organization average (mean = 2.94). The assignment notebook ratings saw the biggest difference for this group jumping from an average of 2.33 to 3. Even so, both the moderately motivated group and the poorly motivated group marked substantial improvements in their organizational tendencies with the exception of the moderately motivated students and their desks. Prior to intervention the moderately motivated students had averaged 1.85 on their desk organization, 1.57 on their assignment notebook rating and 1.71 overall. At mid-intervention though the desk rating average did not change, the other averages for this group went up from 1.57 to 2.85 for assignment
notebooks and from 1.71 to 2.35 overall. Likewise, the poorly motivated student group boasted even greater improvements across all three ratings. This group went from an average of 1.85 to 2.42 on their desk rating, from 1.43 to 2.57 on their assignment notebook rating and from 1.64 to 2.5 on their overall organizational average. Clearly the biggest improvement in organizational tendencies was in the use of assignment notebooks by students. To highlight the improvement of the groups, especially the moderately and poorly motivated group, the researcher once again conducted a one-way ANOVA analysis using SPSS to test for a significant difference in means. A p-value of .05 or above would again indicate that there was no significant difference between the group means. A p-value below .05 would indicate that there was a statistically significant difference between 1 or 2 or all of the groups. Pre-intervention it was found that there was in fact a significant difference between the organizational tendencies of the different groups. The results for the same analysis conducted at mid-intervention are represented in Figure 3 below.
## Tests of Between-Subjects Effects

Dependent Variable: OrgAvg2

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1.529&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2</td>
<td>.765</td>
<td>3.011</td>
<td>.072</td>
<td>.231</td>
</tr>
<tr>
<td>Intercept</td>
<td>153.379</td>
<td>1</td>
<td>153.379</td>
<td>603.931</td>
<td>.000</td>
<td>.968</td>
</tr>
<tr>
<td>MotCat1</td>
<td>1.529</td>
<td>2</td>
<td>.765</td>
<td>3.011</td>
<td>.072</td>
<td>.231</td>
</tr>
<tr>
<td>Error</td>
<td>5.079</td>
<td>20</td>
<td>.254</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>165.750</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6.609</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[a. \text{R Squared} = .231 \text{ (Adjusted R Squared} = .155)\]

### Multiple Comparisons

OrgAvg2

Tukey HSD

<table>
<thead>
<tr>
<th>(I) MotCat1</th>
<th>(J) MotCat1</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly Motivated</td>
<td>Moderately Motivated</td>
<td>.1429</td>
<td>.26937</td>
<td>.857</td>
<td>-1.0870</td>
<td>-.5387</td>
<td>.8244</td>
</tr>
<tr>
<td></td>
<td>Highly Motivated</td>
<td>-.4444</td>
<td>.25397</td>
<td>.212</td>
<td>-1.0397</td>
<td>-.5387</td>
<td>.8244</td>
</tr>
<tr>
<td>Moderately</td>
<td>Poorly Motivated</td>
<td>-.1429</td>
<td>.26937</td>
<td>.857</td>
<td>-.8244</td>
<td>-.5387</td>
<td>.8244</td>
</tr>
<tr>
<td>Motivated</td>
<td>Highly Motivated</td>
<td>-.5873</td>
<td>.25397</td>
<td>.077</td>
<td>-1.2298</td>
<td>-.0552</td>
<td>1.2298</td>
</tr>
<tr>
<td>Highly Motivated</td>
<td>Poorly Motivated</td>
<td>.4444</td>
<td>.25397</td>
<td>.212</td>
<td>-.1981</td>
<td>1.0870</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately Motivated</td>
<td>.5873</td>
<td>.25397</td>
<td>.077</td>
<td>-.0552</td>
<td>1.2298</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 3. One-Way ANOVA Analysis Output for Mid-Intervention Organization Means Comparison*

According to these results, the p-value for this analysis was .072 indicating that the difference between motivational groups with regard to organizational skills had been
reduced enough by the intervention that it was no longer statistically significant. In
essence, the analysis shows that as a result of the intervention the moderately motivated
students and the poorly motivated students had improved enough to be considered of
equal organizational skill to their highly motivated counterparts. Within the framework
of the study, this would imply that their motivation, should they be able to maintain their
organizational improvements, should also show signs of improvement to be discussed
among the results of post-intervention questionnaires and interviews.

**Post-Intervention Results**

*Post-Intervention Observations*

Week 8 of the study concluded the six week intervention on organizational skills,
leaving weeks 9 and 10 open for observation and testing that would help determine how
well students were able to retain and maintain the organizational skills they had learned.
Students were observed discussing what they had learned from the intervention during
the course of the last two weeks and were found to have retained at least the main points
of what organization is and how it can help them as students. Some students were also
able to make connections between school and home with regard to organization. Desks
were observed to have remained generally organized even after weekly cleanup
reminders had been stopped. It was clear that the notebooks had not remained as
organized as they had been during the course of intervention, though they were however,
in far better condition than they had been at the beginning of the study. Several students
even asked on a number of occasions whether the stamps used to track the assignment
notebook usage would be reinstated after the project was complete. Overall, through
observation it appeared that the organizational skills intervention was a success. The final organizational ratings would provide more detail as to how much it had succeeded.

Post-Intervention Organizational Skills Ratings

In the post-intervention stage of this study a comparison of the ratings between motivational groups would help to identify which groups were best able to retain and maintain the organizational skills they had learned during the intervention. For two weeks prior to these ratings students were not required to have their assignments notebooks checked and they were not reminded to clean out their desks once a week as had been the practice during intervention. The results of these ratings are displayed in Tables 11, 12 and 13 below.

The results when compared to mid-intervention are mixed. According to these rating, the highly motivated group seemed to have maintained their organizational improvements since their mid-intervention averages were only slightly lower at the post-intervention interval and only for assignment notebooks which went down from an average of 3 to an average of 2.62 causing their overall organizational average to go down from 2.94 to 2.77. Their desk average remained constant at 2.88.
### Table 11

**Highly Motivated Student Organizational Ratings Post-Intervention**

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
<th>CHANGE IN AVERAGE FROM MID-INTERVENTION TO POST-INTERVENTION</th>
<th>CHANGE IN AVERAGE FROM PRE-INTERVENTION TO POST-INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>J</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>+0.5</td>
</tr>
<tr>
<td>V</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>+0.5</td>
</tr>
<tr>
<td>W</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>X</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Y</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Z</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>+0.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>21</td>
<td>25</td>
<td>-1.5</td>
<td>+2</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.88</td>
<td>2.62</td>
<td>2.77</td>
<td>-0.16</td>
<td>+0.22</td>
</tr>
</tbody>
</table>

### Table 12

**Moderately Motivated Student Organizational Ratings Post-Intervention**

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
<th>CHANGE IN AVERAGE FROM MID-INTERVENTION TO POST-INTERVENTION</th>
<th>CHANGE IN AVERAGE FROM PRE-INTERVENTION TO POST-INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>I</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>+0.5</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-0.5</td>
<td>+0.5</td>
</tr>
<tr>
<td>L</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>T</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>+0.5</td>
<td>+1</td>
</tr>
<tr>
<td>U</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>+0.5</td>
<td>+0.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>13</td>
<td>16.5</td>
<td>0</td>
<td>+4.5</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.57</td>
<td>2.16</td>
<td>2.35</td>
<td>0</td>
<td>+0.64</td>
</tr>
</tbody>
</table>
Table 13

*Poorly Motivated Student Organizational Ratings Post-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>DESK RATING</th>
<th>NOTEBOOK RATING</th>
<th>ORGANIZATIONAL AVERAGE</th>
<th>CHANGE IN AVERAGE FROM MID-INTERVENTION TO POST-INTERVENTION</th>
<th>CHANGE IN AVERAGE FROM PRE-INTERVENTION TO POST-INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-0.5</td>
<td>+1</td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>0</td>
<td>+1.5</td>
</tr>
<tr>
<td>N</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>O</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>Q</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
<td>-0.5</td>
<td>+0.5</td>
</tr>
<tr>
<td>R</td>
<td>2</td>
<td>1</td>
<td>1.5</td>
<td>+0.5</td>
<td>+0.5</td>
</tr>
<tr>
<td>TOTAL MEAN</td>
<td>18</td>
<td>11</td>
<td>15.5</td>
<td>-2</td>
<td>+3.5</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.57</td>
<td>1.83</td>
<td>2.21</td>
<td>-0.28</td>
<td>+0.5</td>
</tr>
</tbody>
</table>

In comparison, the moderately motivated group actually improved their desk rating average bringing it up from 1.85 to 2.57. However, these students also saw a drop in their assignment notebook average in the absence on intervention with that average going from 2.85 at mid-intervention to 2.16 post-intervention. The moderately motivated students posted the same overall average of 2.35 at both intervals showing strong maintenance overall of their newly improved organizational skills as did their highly motivated counterparts.

The poorly motivated group was once again more similar in comparison to the moderately motivated students. This group also saw a continued improvement in their desk rating average going up from 2.42 to 2.57. Their assignment notebooks as in the previous group saw a substantial drop however, going from 2.57 at mid-intervention to
1.83 at post-intervention. This caused their overall average to decrease from 2.5 to 2.21 in the end.

In comparison to their pre-intervention organizational ratings however, all three motivational groups were found to have improved their organization by some measure. The highly motivated students saw the smallest improvement mostly because their ratings had been so high to begin with, leaving little room for vast improvements. This group’s rating increased by an average 0.22 when post-intervention results were compared to pre-intervention ratings. The moderately motivated students and the poorly motivated students did well to show a much greater increase when those same ratings were compared. Moderately motivated students improved their organizational ratings by an average of 0.64 while the poorly motivated students improved by 0.5.

As was done pre-intervention and at mid-intervention, a final one-way ANOVA analysis was conducted in SPSS to determine whether the slight deterioration of overall organizational skills would be enough to create a significant difference in the organizational tendencies of the groups as their initial organizational rating had pre-intervention. The results of this analysis can be found below in Figure 4.
Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1.398(^a)</td>
<td>2</td>
<td>.699</td>
<td>5.971</td>
<td>.009</td>
<td>.374</td>
</tr>
<tr>
<td>Intercept</td>
<td>136.107</td>
<td>1</td>
<td>136.107</td>
<td>1162.679</td>
<td>.000</td>
<td>.983</td>
</tr>
<tr>
<td>MotCat1</td>
<td>1.398</td>
<td>2</td>
<td>.699</td>
<td>5.971</td>
<td>.009</td>
<td>.374</td>
</tr>
<tr>
<td>Error</td>
<td>2.341</td>
<td>20</td>
<td>.117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145.000</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>3.739</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(a\). R Squared = .374 (Adjusted R Squared = .311)

Multiple Comparisons

<table>
<thead>
<tr>
<th>(I) MotCat1</th>
<th>(J) MotCat1</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly Motivated</td>
<td>Moderately Motivated</td>
<td>-.1429</td>
<td>.18288</td>
<td>.719</td>
<td>-.6056, .319</td>
</tr>
<tr>
<td></td>
<td>Highly Motivated</td>
<td>-.5635</td>
<td>.17243</td>
<td>.010</td>
<td>-.9997, -.1273</td>
</tr>
<tr>
<td>Moderately Motivated</td>
<td>Poorly Motivated</td>
<td>.1429</td>
<td>.18288</td>
<td>.719</td>
<td>-.3198, .605</td>
</tr>
<tr>
<td></td>
<td>Highly Motivated</td>
<td>-.4206</td>
<td>.17243</td>
<td>.060</td>
<td>-.8569, .0151</td>
</tr>
<tr>
<td>Highly Motivated</td>
<td>Poorly Motivated</td>
<td>.5635</td>
<td>.17243</td>
<td>.010</td>
<td>.1273, .999</td>
</tr>
<tr>
<td></td>
<td>Moderately Motivated</td>
<td>.4206</td>
<td>.17243</td>
<td>.060</td>
<td>-.0156, .8568</td>
</tr>
</tbody>
</table>

Figure 4. One-Way ANOVA Analysis Output for Post-Intervention Organization Means Comparison

The same qualifications for the p-value apply as they did at the other two intervals. The p-value for this one-way ANOVA analysis was \(p = .009\), well below the .05 p-value that would indicate statistical significance. Essentially, these statistics showed that two or more of the groups were again significantly different with regard to
their organizational skills as they had been pre-intervention. Once again, it was the highly motivated students whose new level of organizational skill was significantly different than the level of organizational skills the poorly motivated students (p = .01) were able to retain without intervention. In contrast, the moderately motivated group (p = .06) did not differ significantly from the highly motivated group this time around as they had in pre-intervention ratings. The moderately motivated group had managed to retain enough of the skills they had learned during intervention, improving enough for there to be no significant difference in organizational ability between their group and the highly motivated one. However, though the average improvement of poorly motivated students was found to be just one-tenth of a point less than the moderately motivated group, they were not able to close the gap between groups as a result of their low organizational baseline.

To better understand just how much each group had improved for later comparison to any changes that may have simultaneously occurred in their motivation, three separate paired sample t-tests were conducted in SPSS to determine whether the improvement of each group in comparison to itself from beginning to end was significant. The paired-sample t-test was appropriate for this study as it is often used in repeated-measures designs that involve an intervention in order to compare the scores or ratings of an individual or group at two different time intervals. Below figure 5 provides the SPSS output for the paired sample t-test comparing the post-intervention organizational rating average of the highly motivated students to their pre-intervention average.
Figure 5. Paired Sample T-Test Output for Comparison of Pre-Intervention and Post-Intervention Organizational Rating Means for Highly Motivated Students

The p-value for this analysis was $p = .169$ which is greater than the .05 necessary for significance showing that the highly motivated group, though they did improve their organizational skills, did not do so to a degree that was statistically significant, possibly because their organizational ratings had been so high to begin with.

In contrast, the results of the paired sample t-test conducted for the moderately motivated group indicated that there was a significant difference in their level of organizational skill pre- and post-intervention. As the output presented in Figure 6 demonstrates, the p-value for this group was calculated to be $p = .004$, well below the .05 requirement to determine statistical significance.
### Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>OrgAvg3</td>
<td>2.3571</td>
<td>7</td>
<td>.37796</td>
</tr>
<tr>
<td></td>
<td>OrgAvg1</td>
<td>1.7143</td>
<td>7</td>
<td>.39340</td>
</tr>
</tbody>
</table>

### Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrgAvg3 - OrgAvg1</td>
<td>.6428</td>
<td>.37796</td>
<td>.14286</td>
<td>.29330</td>
<td>.99242</td>
<td>4.500</td>
<td>6</td>
</tr>
</tbody>
</table>

**Figure 6.** Paired Sample T-Test Output for Comparison of Pre-Intervention and Post-Intervention Organizational Rating Means for Moderately Motivated Students

The results for the third group of students, those who were deemed poorly motivated were as follows in Figure 7.

### Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>OrgAvg3</td>
<td>2.2143</td>
<td>7</td>
<td>.39340</td>
</tr>
<tr>
<td></td>
<td>OrgAvg1</td>
<td>1.7143</td>
<td>7</td>
<td>.69864</td>
</tr>
</tbody>
</table>

### Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrgAvg3 - OrgAvg1</td>
<td>.5000</td>
<td>.57735</td>
<td>.21822</td>
<td>-.03396</td>
<td>1.03396</td>
<td>2.291</td>
<td>6</td>
</tr>
</tbody>
</table>

**Figure 7.** Paired Sample T-Test Output for Comparison of Pre-Intervention and Post-Intervention Organizational Rating Means for Poorly Motivated Students
This group of students yielded a paired ample T-test p-value of .062 indicating that as a group their improvement with regard to organizational skills was quite substantial but technically not statistically significant. Regardless, a vast improvement was noted for the two lower motivational groups over the course of the intervention. An improvement in their motivational habits found in subsequent questionnaires and interviews would indicate that a relationship between organization and motivation may in fact exist.

Post-Intervention Questionnaires

Just as they had prior to intervention, all of the students were asked to complete a questionnaire after the intervention to help track any changes in their motivational tendencies, as well as, to verify the changes that had occurred with regard to their organizational skills as documented by the organizational ratings assigned by the researcher throughout the study. Changes in feelings of psychological needs fulfillment subsequent to the noted improvement in organizational skills would help to strengthen the argument that organization does impact motivation in some way.

To accomplish this portion of the data collection process the post-intervention questionnaire (see Appendix F) once again asked students to rate their own organization, to express how important they thought organization was and to mark off how they felt when they were organized, this time around, from a list of twelve choices. Below Tables 14, 15 and 16 show the results of the post-intervention student questionnaires by motivational group.
Table 14

*Highly Motivated Student Questionnaire Results Post-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>Organizational Self-Rating</th>
<th>Importance of Organization Rating</th>
<th>Should Organization be Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>S</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>V</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>W</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>X</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Y</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Z</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.88</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 15

*Moderately Motivated Student Questionnaire Results Post-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>Organizational Self-Rating</th>
<th>Importance of Organization Rating</th>
<th>Should Organization be Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>K</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>L</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>T</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>U</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>MEAN</td>
<td>2.71</td>
<td>2.86</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 16

*Poorly Motivated Student Questionnaire Results Post-Intervention*

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>Organizational Self-Rating</th>
<th>Importance of Organization Rating</th>
<th>Should Organization be Taught</th>
<th>1-Yes</th>
<th>0-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>3</td>
<td>3</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>3</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3</td>
<td>3</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>3</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>18</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>2.57</td>
<td>2.57</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The most significant change documented by the questionnaires was the disappearance of the previously noted discrepancy between motivational groups with regard to their organizational abilities. It was discovered that pre-intervention the students in the two lower motivational groups believed their organizational skills were actually better than those of the students in the highly motivated group having given themselves an average organizational skills rating of 2.57 for the moderately motivated group and a 2.34 for the poorly motivated group compared to the 2.22 average self-rating of the highly motivated group. If the reader will recall this was not observed to be the case, as evidenced by the organizational averages the researcher’s observations yielded showing the highly motivated students with an average rating of 2.55 and 1.71 and 1.64 for the other two groups respectively. Pre-intervention the highly motivated students thought they were not as organized as they actually were while the moderately and poorly motivated students thought they were more organized than they demonstrated. The
results from the post-intervention survey yielded organizational self-rating averages of 2.88, 2.71 and 2.57 in descending order of motivation (highly, moderately and poorly). After completing the intervention the groups rated themselves more reasonably with regard to their actual skills as their self-rating averages much more closely resembled the averages obtained through the researcher’s observations of their desks and notebooks, which if referenced in Tables 11, 12 and 13 were found to be 2.77, 2.35 and 2.21 again in descending group order. The two lower groups still thought they were more organized than they were, however, the decrease in this discrepancy indicated that perhaps they realized there was more they needed to learn about organization.

A difference in students’ opinions regarding the importance of organization was also detected by the post-intervention questionnaire. It was found that after having undergone the organizational skills intervention imposed by the study, the class had increased their rating of the importance of organization with the highly motivated groups increasing its importance from 2.67 to 3, the moderately motivated group from 2.71 to 3 and only the poorly motivated group decreasing it from 2.71 pre-intervention to 2.57. This slight decrease was mirrored by the fact that three of the poorly motivated students chose not to answer Item 5 on the post-intervention survey demarcating whether or not they though organizational skills should be taught, and one of the students that did answer this question at this interval answered that organization should not be taught to students. Overall, the surveys showed that students’ opinions of both the importance of organizational skills and whether those skills should be taught in school had increased.
Student responses to question 4 again helped to add some further insight into the relationship between organization and motivation as it revealed how students’ feelings of competence, relatedness and autonomy would change when going from hypothetically feeling unorganized in the same pre-intervention item to feeling hypothetically organized post-intervention. The item asked students to check off different feelings in order to complete the statement “When I feel like I am organized and prepared for class I feel…” The choices, along with the responses of each group and the class as a whole are displayed in Table 17 below.

As the table shows, the most common responses to this item were those presumed to have a positive effect on a student’s motivation. In their groups and as a class, the students overwhelmingly responded that when feeling organized they also felt as though they knew what was going on (95.7%), ready to work (82.6%), like they could work on their own (78.3%), answer questions (78.3%), get more work done (73.9%), help others (69.5%) and comfortable talking to others (47.8%). When compared to the discomfort, confusion, need for help, and reservation they reported feeling in lieu of also feeling unorganized and unprepared, the comparison demonstrates the overwhelming effect the students felt organizational skills could have on the kinds of feelings that can heavily impact their ability to be motivated students. Clearly, students across all three motivational groups noted more frequently that feeling organized would positively affect their feelings of competence, relatedness and autonomy regardless of which motivational group the student belonged to. These responses, within the framework of SDT once again draw a clear association between organization and the psychological needs the
theory insists must be fulfilled for self-motivation to improve and helps to strengthen the argument for a relationship between organization and motivation, in this case from the students’ own perspective.

Table 17

*Question #4 Response Analysis Post-Intervention*

<table>
<thead>
<tr>
<th>Item Checked</th>
<th>Highly Motivated Students Responded</th>
<th>Moderately Motivated Students Responded</th>
<th>Poorly Motivated Students Responded</th>
<th>Total Class Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like I know what I am doing</td>
<td>9(17.3%)</td>
<td>7(15.9%)</td>
<td>6(16.2%)</td>
<td>22(16.6 %)</td>
</tr>
<tr>
<td>Like I can work on my own</td>
<td>7(13.5%)</td>
<td>6(13.6%)</td>
<td>5(13.5%)</td>
<td>18(13.5%)</td>
</tr>
<tr>
<td>Like I can answer questions</td>
<td>8(15.4%)</td>
<td>4(9%)</td>
<td>6(16.2%)</td>
<td>18(13.5%)</td>
</tr>
<tr>
<td>No different than before</td>
<td>1(1.9%)</td>
<td>2(4.5%)</td>
<td>1(2.7%)</td>
<td>4(3.0%)</td>
</tr>
<tr>
<td>Comfortable talking to people</td>
<td>4(7.6%)</td>
<td>5(11.4%)</td>
<td>2(5.4%)</td>
<td>11(8.2%)</td>
</tr>
<tr>
<td>Like I should keep quiet</td>
<td>0(0%)</td>
<td>3(6.8%)</td>
<td>2(5.4%)</td>
<td>5(3.8%)</td>
</tr>
<tr>
<td>Like I get more work done</td>
<td>7(13.5%)</td>
<td>5(11.4%)</td>
<td>2(5.4%)</td>
<td>14(10.5%)</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>3(8.2%)</td>
<td>3(2.3%)</td>
</tr>
<tr>
<td>Like I can help others</td>
<td>8(15.4%)</td>
<td>5(11.4%)</td>
<td>2(5.4%)</td>
<td>15(11.3%)</td>
</tr>
<tr>
<td>Confused</td>
<td>0(0%)</td>
<td>1(2.3%)</td>
<td>1(2.7%)</td>
<td>2(1.5%)</td>
</tr>
<tr>
<td>Like I need help</td>
<td>0(0%)</td>
<td>1(2.3%)</td>
<td>1(2.7%)</td>
<td>2(1.5%)</td>
</tr>
<tr>
<td>Ready to work</td>
<td>8(15.4%)</td>
<td>5(11.4%)</td>
<td>6(16.2%)</td>
<td>19(14.3%)</td>
</tr>
<tr>
<td>Total N of Responses</td>
<td>52(39%)</td>
<td>44(33%)</td>
<td>37(28%)</td>
<td>133(100%)</td>
</tr>
</tbody>
</table>
Post-Intervention Interviews

As in the pre-intervention stage the randomly selected students from each group were interviewed one-on-one for about 10 minutes by the researcher who again utilized an interview guide (see Appendix I) to help bring structure to the interview. The researcher took notes during the interview and then reviewed each audio recording in order to make her notes entirely complete. This naturally led to the discovery of new themes to be compared to previous ones. Student responses to the interview questions are represented here through a summarization of student responses to each question.

Question 1: How has your opinion changed since we started learning about organization? Question #1 of the post-intervention interview was aimed at revealing whether or not student perceptions had changed regarding organization and its importance as a result of the imposed intervention. Students in the highly motivated group answered that their opinion about organization was the “same as before” or that it “changed a little bit,” for the better. One student offered that organization had “changed everything” in terms of making things easier to find, to work more efficiently and have extra time to rest and play. This group had previously held that neatness was a big part of being organized, as it applied to their desks, lockers and even their writing in some instances. In the previous round of interviews these students had offered some highly detailed suggestions on the things they could use to stay organized only one of which mentioned assignment notebooks. This time around, they talked about how they “write in assignment notebook(s) a lot more.” In the post-intervention interviews, all five students referenced assignment notebooks as an integral part of being organized and one
of the most influential elements of its importance. They reiterated what they had previously offered as far as having a “place for things” making them easier to find and such, but added that it was also important “to put things [back] where they go.” Having already made the connection between organization and achievement in their first interviews, including being able to listen better, being better in school, not missing out on games and grades if you’re organized, and knowing what to do next, three of the five students agreed that their opinion of the importance of organization had “changed a little bit” and referenced positive consequences of having become more organized. Most of their references focused on being less forgetful/better students due to their increased use of assignment notebooks avoiding the negative consequences of not doing so.

Moderately motivated students for the most part maintained what they had already said about what organization is. Their comparisons concentrated on stuff, supplies and the order of things again, however moderately motivated students also talked about how “you can grab your backpack earlier and you can get ready, you know what you have for homework…” in relation to using their assignment notebooks as a tool for thinking ahead. Like the highly motivated students, all five moderately motivated participants thought that organization was important both pre-intervention and post-intervention so that “stuff wouldn’t be all over and waste a lot of time.’ However, three out of the five moderately motivated students admitted that at this point they found organization to be “more important than before.” In comparison to the first round of interviews during which only one student mentioned schedules as a tool for organization, this round of interviews recorded three out of the five students commenting on
assignment notebooks as an important part of being organized, demonstrating the organizational improvements they had encountered which were also captured by their ratings. The general increase in detail regarding description and uses for organization throughout their responses to this question also helped to highlight those improvements.

A similar theme was identified among the poorly organized students in that they seemed to have developed a slightly more refined grasp of the extended effects of organization. Most of the students were able to explain in one way or another how organization might effect different facets of education such as grades or participation. This came across from responses like, “finding things makes it easier to get stuff done,” “finding things can help get stuff done faster,” and “finding your homework so you don’t get in trouble.” In general however, among their comments was a noticeable lack of their assignment notebooks, which only one student mentioned as tool to help keep organized. All five students agreed that organization was important with one student feeling this way more than before.

*Question 2: Would you describe yourself as more organized or less organized than before? What has changed?* Of the highly motivated students all five participants answered that they felt they had improved their organizational skills since the beginning of the study. Of the three students that felt they were “kind of” organized previous to intervention, two had shifted clearly toward feeling organized rather than not with the third noting he still felt “kind of organized” but “a little more organized” than before.” “I feel better...in a way that I know where my stuff is” said one student who also mentioned doing a better job of remembering things now because “sometimes I would forget
before.” In general these student responses showed the small organizational improvement that was to be expected from a group that was already so very well organized. Even so, their improvements ranged from doing a better job of keeping desks/lockers clean to using assignment notebooks very nearly every day across the group, with one student highlighting that the notebook helped because it caused her to feel “reassured that she had done her work because she was able to look back and check it.” Other students also felt better as students, with one feeling more prepared and ready to go and another feeling better organization had allowed for him to listen better as a result of spending less time searching for materials in his much cleaner desk. Students in this group mostly answered that they felt more organized than before and that more frequent use of their assignment notebooks had been a big influence in feeling this way.

Like the previous group, of the five moderately motivated students all five stated that they felt more organized than they had before the intervention. Two students focused on the fact that they were able to “find things faster” or more easily while a third felt more organized as a result of knowing what the homework and expectations were. “I knew what my homework was…before I had to ask a friend or call a friend to help me,” said one student while another offered that he felt more organized because “I know where everything is now.” In general, their statements provided that they felt more organized than they had before and that as a result they were less forgetful since the intervention and as a result more prepared. Of these students, four out of the five had previously mentioned forgetting something at some point. In the post-intervention interviews, four out of five said they no longer forgot things they needed and the fifth student offered that
this happened much less frequently than before. While three of these students pre-intervention said that they used their assignment notebooks only sometimes when there was a lot of homework assigned but usually forgot, and two said that they used the notebooks every day. Post-intervention all five students in this group answered that they used the notebooks almost every day, two adding that the stamps from the intervention were a big help and three mentioning that the practice helped them to remember their homework.

The poorly motivated students demonstrated a theme of improvement with regard to organization. “I’ve been keeping my desk more clean and my room,” said one student and “since people started stamping I got more used to writing” in his assignment notebook. Others who were less detailed in their responses thought their organization had gotten “a little better,” with one student answering that he felt “organized” in contrast to his definitive response of “unorganized” during the pre-intervention interview. This student’s transformation along with the two students who were organized but totally distracted demonstrated how learning about the advantages of their organization could increase their appetite for achievement. The group overall showed a much better understanding of the impact their organization could have on other elements of school. Four out of the five students made comments clearly delineating pride over their ability to have improved at something, with those feelings spilling over to other questions and improvements in competence, relatedness and autonomy. Though not discussed by the students directly in these interviews, the improvement this group saw in their use of their
assignment notebooks had a big impact on their homework achievement as was
communicated by them, and in turn, a strong impact on their relatedness in particular.

*Question 3: How do you like school now? What has changed? Is school easier or
harder now? Asking for help?* Learning whether or not students felt school was easier or
harder after improving organization would allow for a better understanding of the impact
organization could have on competence especially and in turn relatedness. Pre-
intervention interviews indicated that there were not much the highly motivated students
found frustrating about school. A subject here and there, social studies or math or none at
all were mentioned, but otherwise all of these students seemed to like school just fine.

“No social studies has become less frustrating…because before you came I used to lose
my packets, now I put them in one spot,” said one student. Things are “easier” and I feel
like “maybe I can get the better grade if I am more organized,” offered another student
who also thought that “maybe I help friends a little bit more.” Another response echoed
that “before I used to help some certain people, now I help all the people.” Of the four
students who had mentioned being somewhat frustrated by a particular subject in the
beginning, all answered that things had become “a little bit easier” since they started
learning about organization. Although these students had even previous to intervention,
been observed as participating regularly in class, four out of five them commented that
they felt “better” about school and the subjects that were frustrating them in one way or
another. One student felt Social Studies was becoming less frustrating because he was
“thinking more” because his desk was cleaner giving him more space to do better on
work and have more supplies that he needed. In a similar regard, the one student who
was less frustrated by Social Studies because she had not lost any more study packets due to her increased awareness for organization. The same student also commented that she felt she was a better student than before, getting better grades, finding herself with more free time and using her time to finish homework early or while still in school. Overall a sense of renewal and reassurance was highlighted in many of the students’ answers to how increased organization had changed their opinion about school. Furthermore, in their pre-intervention interviews this group showed little reservation about asking for help from their teacher or classmates implying strong relatedness to the group. All of them said that they offered help to their fellow classmates and four out of five had reported feeling proud in some way when doing so. The major change that occurred during intervention was that three of those four students had improved their relatedness further, reporting that they extended themselves toward helping classmates that they did not regularly communicate with.

The moderately motivated students seem to be less divided than they had been before regarding their feelings about school. They felt “happy” “good…more ready,” about school, that they could “follow directions better” because they were less distracted and that they liked school “kind of better.” Their feelings were for the most part positive, with one student mentioning that he felt better about school but that the same subjects were still frustrating him. This happened to be a student who struggled through the course of the intervention with keeping his desk clean and his notebook filled in. The two more reserved students in the group were the ones that felt “kind of better” about school both pointing out that their focus had been improved as one mentioned being able
to listen better and the other being able to better follow direction and being less
distracted. One student maintained that she was happy about school and that math was
better because she did all her homework and had gotten more practice while the last
student in the group mentioned that he felt good in school and similar to the two reserved
students, “more ready to go.” Though the same subjects were frustrating to him as
before, he felt he was also doing better at “catching up.” With this group it was their
focus that had improved as a result of their organizational intervention. This group
communicated only a slight improvement in their relatedness with the two more reserved
students answering that they felt less shy about asking for help and the other three felt
just as comfortable as before. In connection to that, these students were observed to
participate just slightly more toward the end of the study than they had in the very
beginning. They did appear however to take more of an interest in the benefits of
organization toward the later stages of the study than they had early on suggesting
perhaps that there was some progress being made toward increased motivation as a result.

The theme for poorly motivated students on question 3 is also “better,” “I feel
more comfortable...like I can talk to more students now,” said one student. “I’m
participating more,” and getting along “better,” said another. Better focus, less forgotten
homework, better participation, less worrying were commonalities among the responses
for these students. All except one student gave his/her version of how improving
organization has helped to improve their previous frustrations. In general this group
mentioned things like having better organized notes/not lost notes to study from, better
access to their supplies because their desks were in order, and creating lists to know what
to do giving less cause for worry. From these accounts arises a theme of improved confidence and participation, as a result, lending itself to immensely increased relatedness as their responses to question four will show.

*Question 4: How do you feel when you are in school? How do you feel as a student? How are your grades? Do you feel like learning about organization has made it easier or harder to try your best? How do you think your teacher feels about all of this?*

This question lent itself to further understanding how organization improvements among students impacted motivation through competence and relatedness especially. Answers to this question given by students in the highly motivated group provided a great deal of insight as to just how much organization can impact our psychological needs. One student reported she felt “like a better student than I used to be before…getting better grades” because refining her organizational skills had helped her to schedule more study time resulting in “getting E’s on all my tests lately.” She also reported as did another student that she “always does her homework in school and after at home…doesn’t have any.” Student X answered that she felt she was “doing better in band and in school,” that she was “doing herself a real favor” by keeping her instrument parts organized so as not to misplace them, leaving her more time to practice. The same student extended her answer to include that now she completes most of her homework during the after-school program she attends which leaves her with a lot more free time for personal interests at home. This conclusion was of course accompanied by a big, wide smile on her part. Four out of five of the students felt “better” about some aspect of school in the wake of their organizational intervention. Aside from the general improvement most of these
students reported with regard to achievement or competence, three of them also noted an improvement in their relatedness, particularly with their teacher while the other two students thought there was still room for some improvement in that regard. The general consensus despite their originally superior organization and motivation was that organization could only help.

The theme among the moderately motivated students for this question was an increased sense of relatedness with four of the five students discussing feeling more relaxed in school, getting along better and/or talking more. “I’m feeling more prepared and relaxed and comfortable,” said one student though he did not think it had affected his relationships for better or worse. Another student offered that she felt more “comfortable” because she felt other students thought she was doing better. Preparedness as a result of increased organization was another common point of discussion among these students, who talked about there still being room for improvement with regard to their grades and about organization being the tool that would help in some way. As an extension of their overall increased sense of relatedness, three of the students discussed feeling more comfortable whether in terms of participating more or feeling more confident when answering questions in class. The remaining two students felt their relatedness had not changed but had possessed a good relationship with the class and the teacher from the beginning. There was a sense with this group that the teacher was happy about their progress in this regard, but that there was still some room for improvement.

Like the moderately motivated students, the poorly motivated students communicated clearly a theme of increased motivation as a result of increased comfort
and relatedness, with higher confidence as an underlying factor. “I don’t lose papers…I feel more comfortable,” one student explained because when you lose things you have to get parent signatures which did not make him feel good. Another student talked in great depth about the changes he had experienced in his relatedness. He said “school has stayed the same,” meaning academically, however, “I feel much better because I know I am doing better.” The same student reported that his teacher “feels about me better cause she always calls on me know…I’m in charge of the promethean board.” His response was genuinely elated at the thought of being noticed within the group. In general responses from this group were positive except for the one student who was extremely unorganized to begin with and who also had excessive absences from school. Her responses seemed diluted and she was more interested in not missing the dance the class was practicing than anything else. Four of the five students in this group talked about things that led to organization making it easier for them to try harder. Most of them described circumstances, guided by questioning to help them elaborate, on how better organization had helped eliminate some of the obstacles that once stood in the way of their motivation as those obstacles made school seem like an environment much more inclined toward failure than success. It appeared that some of the confidence demonstrated by this group’s responses to questions 3, had transferred over to their relatedness as well spurring these students toward more of an eagerness as opposed to their initial hesitation toward school. The two students who were initially observed to be organized though poorly motivated responded in a much more motivated fashion. All of
the students felt their relationships with their teacher had improved except the student mentioned to have made very little progress with regard to organization.

*Question 5: Do you think unorganized students get treated differently than organized students?* This question was asked in order to begin to understand the student perspective regarding the impact of organizational skills on their learning environment. Of the highly motivated students, two gave more personal accounts in response to this portion of the interview. One student talked about how organization was good because not procrastinating made it fun afterwards and it made things less frustrating than in earlier grades when she would forget things like homework and would have to miss recess because of it, “sometimes I think the teachers kind of get mad at them (unorganized students)…I would not feel good at all,” she reported. Another student reported that he felt he heard “a little more” praise from his teacher because of fewer complications like forgetting homework while a third supported this by adding that “kids that are unorganized they lose a lot of stuff and they can’t find stuff as fast as kids who are organized.” The students in this group all concurred that organized students were better off than unorganized students because they lost fewer things, got more compliments or felt happier because they received less criticism from the teacher. They felt that unorganized students probably felt “embarrassed” (when asked repeatedly to do something or to have parents sign their assignment notebooks), that those students might be made fun of and that they were probably more worried and stressed out by school than organized students would be.
Interestingly enough, the consensus found among the moderately motivated students regarding the differential treatment of organized and unorganized students was not as unanimous as it was in the highly motivated group. When asked, only three of these students explained the same connections between being unorganized and having to feel bad or embarrassed for various reasons as a result of that, and vice versa for organized students. One student gave a detailed account of her opinion stating that “unorganized students, they feel lost; say they forget their homework and they feel really scared the teacher might yell at them or something…organized people instead feel confident that they have their homework and what they are doing is always right.” Moderately motivated students focused here on being recognized for improved achievement and being part of the group, reinforcing the fact that perhaps their moderate organizational skills are reflected in their slightly lower competence, relatedness and autonomy in comparison to their more organized and coincidentally more motivated counterparts. When asked, only three of these students explained the same connections between being unorganized and having to feel bad or embarrassed for various reasons as a result of that, and vice versa for organized students. Two students, who had some difficulty with the intervention and later with retention, felt there was no difference in the treatment of organized and unorganized students, resonating with the earlier discovery that less motivated students may be less critical of themselves sometimes to avoid diminishing their competence, relatedness or autonomy as a result of poor performance.

A similar trend was found among the responses of the poorly motivated group as well. Those students, four of the five, who had improved and retained their
organizational skills through the course of the intervention answered that they felt there was a difference in the way organized and unorganized students were treated, with organized students being treated better than unorganized students in general. They offered that “I think they do (get treated differently) cause I mean the teacher she feels more happy that she has a clean room not a super messy room…she doesn’t have to tell you ‘clean your desk’…it feels kind of better not to get treated like you’re messy.” Another student suggested that the difference was that “if they’re organized normally the kids are like smart, if they’re unorganized they’re not as smart as the other ones…if you’re smart you get picked right away. The consensus was that when one is organized often times the teacher is not mad/more happy and that there was compliments/special recognition involved, while unorganized students were treated to constant reminders and even reprimanded in some cases because of their messy desks. It appeared as though these students had made enough of an improvement in their organizational skills to see a positive difference in their relationship with their teacher whereas the lack of improvement for the one student left her feeling perhaps that there was no change due to organization. This theme in the answer spoke directly to the impact organization could have on motivation through its impact on needs like relatedness.

Post-Intervention Teacher Interview

The post-intervention teacher interview truly lent itself to this study as a data verification tool, entrusting that the teacher’s opinion on changes that were observed throughout the study would serve as the most valid point of comparison as she was the objective, certified professional, who spends the most significant amount of time with the
students. Her second interview, summarized here, provided a great deal of insight and support both for the intervention imposed and the questions this study was looking to answer.

The first point of discussion in this interview was of the changes that had occurred in the general level of organization, if any. The changes in general, she felt, were focused on the fact that the students now “have a better idea of what organized looks like” as she noted that she saw “less chaos inside their desks… they are more organized and more likely to write in their assignment books as opposed to when they first started.” The teacher provided that roughly 98% percent of students were now using their assignment notebooks and were more likely to turn in assignments. This has helped to “jumpstart” an improvement in achievement, especially, she said, with the students that needed it the most, “it seems like the ones that actually needed the push to it…there are still some students forgetting assignment but it is a less likely occurrence than before…it did help the ones that needed it.”

The most significant change as far as the class atmosphere was in turn focused on anxiety. The teacher reported that post-intervention, the general level of anxiety in the classroom had been noticeably diminished. She explained that prior to intervention, “there’s a level of frustration when a student comes in unprepared…everyone can feel it…so I think everyone’s effected when one person’s not prepared,” “I think the level of frustration and anxiety has gone down because the likelihood of someone not doing their homework has decreased.” She further explained how this improvement had effected the relatedness of the class as a whole, “there’s a level of frustration on my part and…most
of the times I’m collecting homework in the beginning of the day so if I have a negative response to a student who says they forgot it (homework)…it’s most likely going to effect the way they are treated and the way they feel…it sets the tone for the rest of the day.” She reported that the fact that homework had become more regular in the classroom has allowed for fewer instances in which the anxiety can rise.

Lower anxiety, she said had also helped to improve some of her relationships with her students. She felt that some of the students who were “repeat offenders” were not as frustrated and that the climate in the classroom in general was less nervous and anxious. She felt also that students were “more likely to approach me now because they would probably have their assignments completed.”

Over the ten weeks of the study, the teacher said that she noticed an overall improvement in organization as well as an improvement in motivation. She explained that the routine students had developed of using their assignment notebooks and being more aware of their organization had helped them to keep track of the expectations placed on them (i.e., Homework) and in turn had helped to make it easier for them to know what they needed to do to fulfill those expectations once on their own. As a result of the changes she reported, the teacher added that teaching organizational skills to students should be applied to classrooms “absolutely, it’s a good beginning of the year activity to give students an additional push, to show them what organized looks like and walk them through the steps so that the students that you just take for granted should know perhaps they don’t, so it just gets them into the habit of being more organized and prepared and ready for what is to come.” She noted that time definitely allows for an
intervention like the one presented by this study to be implemented especially if teachers were to utilize their more organized students as mentors/monitors for those who needed extra practice and support.
CHAPTER V
DISCUSSION, SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Discussion of Results

Over the course of this study various types of data were collected and presented to subsequently undergo a complex, concurrent triangulation in order to provide a richly detailed examination of the relationship that it proposed might exist between organizational skills and motivation. In the sections below each type of data will be interpreted and compared to itself in order to be integrated with each other type of data in the summary to this section, which should provide a complete picture of what this study found in its exploration of organization and motivation.

Pre-Intervention Results

Over the course of this study, the researcher was able to observe firsthand the organizational and motivational tendencies of 23 fifth grade students. The observations provided an important understanding of the climate of the classroom, the true tendencies of students and in the end, a point of comparison for what those students and their teacher reported in their questionnaires and interviews. At the very beginning of the study, the observations reported earlier found a classroom that had a positive climate in general, but an obvious lack of both organization and motivation for some students despite the teacher’s attempts at improving preparedness by providing communal supplies to each
table. This was verified by the pre-intervention teacher interview as well as the motivational categorization sheet provided by the teacher placing each of the students into one of three motivational categories; high, moderate and poor. It was observed that for the most part the students who lacked organization were also the students who were the most distracted and distracting. Students who were initially observed to be organized and prepared were observed to participate regularly in class and in a much more constructive and focused manner than their less organized classmates. As such, these initial observations reported in detail previously, were the first implication in this study that a relationship between organization and motivation did exist. As the other data were collected and combined with these observations a more complete picture of this relationship began to emerge.

Following the observations, the organizational ratings, which were the next piece of data to be collected, combined with the teacher categorization sheet to reinforce what had initially been observed with regard to the relationship between organization and motivation. The organizational ratings provided a numeric value for each student’s organizational abilities which was a mean average calculated by combining the score for each student’s desk organization and his/her score for assignment notebook use. These measures were taken at three different intervals during the study, pre-intervention, mid-intervention and post-intervention, in order to be able to track the organizational changes of students as a result of the intervention and then to be able to compare those changes to any that may have been recorded or observed in terms of their motivation as well. As the first organizational ratings were being recorded and calculated by the researcher, the
teacher was asked to complete a motivational categorization sheet in which she
categorized the students into three motivational categories. To avoid cross-contaminating
the data, the researcher did not collect the teacher’s categorization of students into
motivational groups until the pre-intervention organizational ratings had already been
recorded, reducing the risk of the researcher to rate a student’s organizational tendencies
under the influence of already knowing their motivational category and thus creating a
false relationship. Even with precautionary measures in place, once the results were
combined into tables for each motivational group, it was clear that the organizational
averages of the most highly motivated students were far better than those of their
moderately motivated and poorly motivated counterparts. The discrepancy between
motivational groups with regard to their organizational tendencies was so great that it was
found to be of statistical significance, building further the support that a relationship
between the two factors does exist.

The student responses on the first round of questionnaires helped to reinforce this
discovery to some degree, while also providing a new and unexpected occurrence in the
data. In order to identify any impact organization might actually have on motivation,
item 4 of the questionnaire asked students to explain how feeling unorganized and
unprepared would make them feel by choosing from a list of 12 items derived from one’s
feelings of competence, relatedness and autonomy. As was represented in Table 7,
regardless of their motivational standing, students overwhelmingly gravitated toward the
more negative feelings of discomfort, confusion and a need for help, indicating that their
competence, autonomy and relatedness, and as a result, their motivation would be negatively impacted by a lack of organization and preparedness.

Interestingly, student responses to items 1 (How organized do you think you are?), 2 (How do you feel about organization?) and 5 (Do you think teachers should teach students about organization? Why?) indicated that though they agreed on how organization might affect the feelings SDT proposes effect our motivation as well (Deci & Ryan, 2000), they disagreed with regard to their organizational abilities at this point in the study. The self-ratings of students taken from the questionnaires resulted in an obvious discrepancy between highly-motivated students and the others, though not as they had in the organizational rating the researcher recorded. Student self-ratings of organizational tendencies clearly indicated that the moderately motivated students and the poorly motivated students believed they were more organized than their highly motivated classmates. This unexpected outcome actually provided a great deal of insight with regard to student motivation. The elevated ratings among the lower groups when compared to the lower self-ratings of the more highly motivated group suggested that less motivated students may tend to be less critical of themselves when it comes to school and as a result more inclined to maintain the status quo, than are highly motivated students. Highly motivated students it appeared maintain a higher standard for themselves. They rated themselves lower than the other groups despite their obvious organizational excellence as identified by the researcher’s organizational rating of their desks and notebooks. They felt there was still room for improvement, as shown by their lower self-
ratings on organization and were more motivated for further instruction and guidance as evidenced by their higher rating on whether or not organization should be taught.

Student responses to these questionnaires helped to strengthen the investigation into the relationship between organization and motivation as it revealed to some degree students’ motivational tendencies through their feelings of competence, relatedness and autonomy when feeling unorganized.

The interviews which followed the questionnaires looked to explore much of the same with regard to students’ understandings of organization and their current level of motivation, only in greater detail in a one-on-one setting. As in many cases, the interviews with students allowed for the study to delve even deeper into the understanding of this relationship as they allowed for the observance of mannerisms, poise and body-language of students as opposed to just their opinions. As such the first round of interviews revealed a number of themes that helped to make sense of the differences previously identified by observations, ratings and questionnaires. The three major themes were of course differentiated understanding of organization, discrepancies in competence and relatedness among motivational groups, and motivating factors.

Understanding of Organization. As could have been expected to some degree, the fact that the highly motivated students expressed the most elevated and detailed understanding of organization, did not come as a surprise. While those students were able to provide more specific examples of organization, moderately motivated students and poorly motivated students were not able to do the same for the most part. The greatest difference was that highly motivated students, made mention of using their
assignment notebooks as an organizational tool while in comparison very few of the other students did the same. Those same students were also able more often to associate organization with achievement and achievement with motivation. This was significant as it spoke to the possibility of a misguided understanding of organization potentially hindering a student’s ability to see organization as a tool for success that might then further motivation. This was clear especially in conversations with poorly motivated students who saw organization as important because it made things “easier to find,” not in order to be able to move further ahead as the highly motivated group or even the moderately motivated group suggested, but rather to avoid the repercussions of missing assignments. There was a distinctly negative perspective to their reasoning and understanding of organization.

*Participation and Relatedness.* Likewise another theme highlighting differences among the groups was drawn from their discussions on participation in the class. In these conversations, the researcher noticed a strong command in the speech of many of the highly motivated students, which dissipated across the moderately motivated group and almost disappeared entirely with the poorly motivated students. Though organization was not a topic they regularly discussed, nearly all of the highly motivated students were enthusiastic to express their opinion and there was an obvious confidence and a seriousness about the interview that was not mirrored by the other groups. The better organized, more highly motivated students as it turns out, were particularly sure when commenting on their participation in class. Though most of the moderately motivated students did not appear to shy about this, some were. The highly motivated students most
often responded that they had strong relationships with both the teacher and their peers, that they had little reservation about talking to these individuals or asking for help. They distinctly pointed out that most of the time they were being asked for help, where this was not the case with the other groups, at least not to nearly the same degree. It was obvious in their discussions that they felt competent and related to their surroundings enough to be motivated to answer questions even when unsure of the answers which was an issue for some of the moderately and poorly motivated students. Their demeanor was far more confident and commanding as a group than any of the others, physically and verbally representative of the impact their elevated organization had on the feelings that impact motivation most.

**Motivating Factors.** Motivating factors as a theme further separated the groups from one another in these interviews and in doing so lent further support to the idea that organizational skills can influence motivation. When asked what would make them feel good to hear people do or say in school, responses fell into three categories, praise and recognition, encouragement and comfort, and reward. The highly motivated students were those who wanted praise and recognition for their excellence. In combination with their observed behaviors it was obvious that being recognized made them want to be recognized again even at new endeavors, it was a tool they used to motivate themselves on a daily basis. They used their organization as a means to achieve the success that would gain them their recognition according to some of their responses. The moderately motivated students, wanted praise, but in the form of acceptance or encouragement. Their answers communicated they had an uncertainty in their performance for which they
need to be reinforced with kind words from the teacher. The poorly motivated students were the first group to mention reward, the lowest form of motivation according to SDT. In actuality they mentioned avoiding punishment more than they mentioned rewards, but it was clear their actions were motivated by an avoidance of consequence, that they did what they could to stay out of difficult situations rather than to better themselves.

The clear distinctions among the groups represented during the course of the interviews fell directly in line with the propositions made by SDT regarding the development of self-motivation through the fulfillment of competence, relatedness and autonomy. The differing views of organization expressed by these students in the interviews help to explain to some degree their difference in motivation. Highly motivated students largely were able to make a connection between organization and achievement. Achievement is what warrants the praise they desire, which builds their competence and allows their relatedness to flourish as evidenced by their heightened participation. The other students have the same desires, as we all have the same psychological needs according to SDT, however, their interviews when combined with the results of their organizational ratings, questionnaires and observations suggest that their noted lack of organization may be the obstacle in the way of fulfilling their psychological needs in order to improve their motivation.

The teacher interview during this portion of the study reinforced the findings of the organizational ratings in that both the researcher and the teacher found the class to be divided into thirds roughly as far as their organization was concerned. The teacher expressed that the climate of the classroom was warm and friendly and that she often
provided added support, and extra time and patience, for students whom she felt needed it. This helped to clarify why some students despite poor organization and poor motivation, felt they had a good relationship with the teacher. Prior to intervention the teacher felt that differentiated instruction along with improved reading and parental involvement were key factors to improving the level of motivation in her class. Her opinion post-intervention would change to include organizational skills as one of those factors, lending itself to the data already supporting that relationship.

**Mid-Intervention Results**

The results of the mid-intervention observations and organizational skill ratings served an important purpose in that they helped to document what organizational changes occurred in students during the course of intervention. Both observations and organizational ratings found a drastic improvement in the organizational tendencies of the class across all motivational categories. The moderately motivated students and poorly motivated students improved so much so, as a result of the on-going intervention that statistical analyses conducted at this point no longer showed a significant difference among the groups. Results also showed that the increase in use of assignment notebooks had been the most influential factor in the improvement of organizational skills for all three motivational groups. Observations of the class saw a noted improvement in the focus of some of the students who were previously observed to be very distracted and a very impressive improvement with the general condition of student desks. Upon the conclusion of the study these results would help to identify, by comparison, how much of what was learned during the intervention had been retained by students in each of the
three motivational groups and help to determine whether future intervention should be shorter, longer or a more permanent part of the daily curriculum.

*Post-Intervention Results*

Post-intervention results were fueled by the fact that intervention had been withdrawn from the class. For the last two weeks of the study, students were not reminded to clean their desks, nor was the use of their assignment notebooks monitored on a daily basis as it had been during intervention. Observations during this period continued to show an improvement in the overall motivation of the class. Despite the upcoming holiday break, which encouraged more boisterous behavior among even the most organized and motivated students the condition of the desks especially was maintained to a surprising degree. Students were observed reminding each other of what they had learned, whether to tidy up or write homework down, highlighting a general increase in the relatedness among the students. Whether this was because of their individual improvement or because they now felt a part of something as a whole, is uncertain. In any case, the positive climate that was first observed had become more related overall yet more controlled, with less commotion when students were asked to approach the teacher’s desk in groups and a better ability to follow directions. Even in the process of the entire class learning a new dance for a holiday show, the group was able to maintain themselves in an orderly though enthusiastic fashion. The ratings indicated that though the organization of the groups had slightly decreased since removing intervention, the moderately and poorly motivated groups actually continued to improve their desks since their mid-intervention assessment. The results showed that the
highly motivated students and the moderately motivated students were able to best maintain what they had learned as their collective averages decreased only one-tenth of a point. The poorly motivated students saw more of a drop in their average but had made a vast improvement in comparison to their pre-intervention ratings. Statistical comparisons of pre-intervention and post-intervention organizational ratings provided additional support for the observed improvements showing that the moderately motivated group had improved to the point of statistical significance and the poorly motivated groups had just missed the mark of doing so as well. The biggest ratings drops were found with regard to the assignment notebooks. This indicated that the intervention has made its biggest impact in this regard and also implied that this area of organization may be in need of extended intervention. Surprisingly, several students ranging in motivational assignment appeared to have noticed this on their own and asked on several occasions if they could have the stamps they used to monitor the notebooks back once the study was complete. It was apparent that this portion of the intervention had been a success with the students in that they wanted to continue on with it even in the absence of the researcher and the completion of the study. The fact that these students had taken the initiative to want to maintain and possibly improve their progress on their own spoke volumes of how the organizational intervention had also begun to positively impact motivation in the class. Of course there were students whose individual progress had not yet allowed for a noticeable impact on motivation, though the positive nature of the post-intervention results implies that perhaps extended exposure to the intervention may help sustain such an improvement.
Both the questionnaires and interviews post-intervention continued to add to the wealth of data that had been collected in support of the relationship between organizational skills and motivation. This time around, assuming the organizational improvement across the motivational categories, item 4 on the questionnaire asked students how they feel when they are organized and prepared for class. The item provided the same 12 options as before and this time the students chose the statements that implied feelings of increased competence, relatedness and autonomy. Their responses indicated they would be more inclined to feel comfortable, like they could help others, and like they could answer questions among other things rather than uncomfortable and confused as they had in lieu of feeling unorganized and unprepared. Although the questionnaires did not directly ask if students felt more competent or related than before, student responses to item 4 (When I feel like I AM organized and prepared for class I feel…) when combined with their obvious improvement with regard to organization skills as reflected by the organizational ratings of the researcher, the teacher interview and their own self-ratings, a clear connection between improved organization and improved motivation can be made.

The post-intervention student interviews further supported this relationship as the theme across all the interviews for all of the questions was “a little bit better.” All three groups of students talked about school being a little bit better, certain subjects that were once frustrating were a little bit better, participation was a little bit better, and relatedness was a little bit better. While some of the highly motivated students had less to report probably because of their already elevated motivation, others in the group saw
improvements anyway, citing more time to practice instruments, which made them feel more competent with them, or more time to play because homework was done sooner, which helped them improve relatedness with peers or family members. Across the moderately and poorly motivated groups, students were able to make better connections between organization and achievement and achievement and motivation, something they were not able to do before. There was more confidence in students’ voices overall. The most drastic change was by those students in the poorly motivated group. In their first round of interviews there was an uncertainty and a distracted nature about them; many of them having difficulty concentrating and sitting still all the way through the interview. These students had made a huge leap in competence reporting that they were participating better with one student, all smiles over having been dealt more responsibility and more recognition by his teacher and in turn his peers. The improvements though small in most cases were obvious overall and particularly for some individual students. In effect, many of the students stated in one way or another, that since learning about organization as they called the intervention, it had become “easier to do better.”

The post-intervention teacher interview helped to provide a validity check again to what had been observed and documented by the researcher as well as to provide some further insight into the changes that had occurred over the course of the study with regard to organization and motivation. During the course of the interview, the teacher verified that the increase in assignment notebook use among students was of particular importance as was also noted by the effect it had on student organizational ratings over
the course of the study. Her interview summarized that the intervention was able to increase student organization and in turn improved achievement by increasing homework return among students. She reported that these improvements had most notably helped to decrease the level of anxiety in the classroom both for students who were previously unprepared and for those who were. In essence, her interview verified that improving organization, had improved competence by increasing homework return among students, which had improved the relatedness in the classroom by lowering the anxiety of all the students and the teacher, making it easier to communicate and move forward. As such, this portion of the data are perhaps the truest indicator of the existence of a relationship between organizational skills and motivation as depicted in Figure 1 of this study. The teacher’s opinion that organizational skills were not a deciding factor in the motivation of students changed from the time of her pre-intervention interview to include those skills as a factor that can influence the psychological needs that determine our motivation.

**Summary of Findings**

In summary, the data collected, presented, analyzed and interpreted by this study over a period of ten weeks provided quantitative and qualitative data that was synthesized in an attempt to understand whether or not a relationship between organizational skills and motivation exists. Framed by Self-Determination Theory, the data was aimed at making sense of how organizational skills impact competence, relatedness and autonomy in students as a means of effecting their motivation. The proposed intervention which concentrated on increasing students’ organizational skills by improving the neatness of their desks and the use of their assignment notebooks, was imposed to create an effect to
which any changes in motivation could be compared. As the observations, organizational ratings, self-ratings and teacher interviews showed, through qualitative and quantitative analyses, the level of organization among these students was obviously improved by the intervention. Consequently, small improvements in individual and group motivation had begun to reveal themselves before the conclusion of the study.

*Competence*

The first of the psychological needs to be impacted by the intervention was the competence certain students displayed in the classroom environment. Triangulation of data had indicated that initially most students participated in class in accordance to their motivational and organizational grouping. Students who were motivated and coincidentally generally organized at the onset of the study were the same students who were observed participating and answering questions most often. Other students, though willing to participate as volunteers for writing on the board or operating classroom technology, were not as accurate or sure of their answers during classroom learning and discussion which came across clearly in their tone, stating answers more as questions to be confirmed or denied by the teacher. Many in the moderately and poorly motivated groups missed cues from the teacher or lost track when the class was reading aloud. Subsequently, the synthesis of post-intervention data produced an observed change in the way students communicated in class, speech becoming clearer and more direct for many students though not all, and behavior more focused despite remaining playful at times. Only 2% of the students in this study had reported feeling “like they knew what they were doing” when unorganized while 16.6% reported feeling this way when they were
organized. Similarly 2% had reported that they felt “like they could answer questions” when unprepared in comparison to the 13.5% that felt this way only when prepared for class. As in the vast majority of the studies on student organizational skills that cite time management and planning/prioritization as critical elements of practical organizational skills (Anday-Porter, Henne & Horan, 2000; Gambill, Moss & Vescogni, 2008; Sedita, 1995), so there was in this study as well, a level of reassurance provided by the more regular use of assignment notebooks, allowing students to feel more secure in the fact that they had fulfilled their teachers expectations thus elevating their competence, as confirmed by the teacher herself post-intervention. Increasing organization had positively influenced achievement and had begun to lead to increased feelings of self-efficacy among the students (McLean, 1995) as predicted by the study in Figure 1.

**Relatedness**

Relatedness was most immediately affected by the increase in competence noted among students as it allowed for students who had previously felt less inclined to speak up or to certain classmates to begin to do so. Zero percent of the students had felt comfortable talking to others under the premise of being unorganized or unprepared, while that number jumped to 8.2% when the premise was changed to being or feeling organized. Of particular importance with regard to this was the observation of group work post-intervention. Students who had previously been observed using group work as a time to relax or partake in other, perhaps more entertaining activities were now observed taking a more active role in cooperation with their more motivated counterparts. Students’ increased perception of their ability to successfully engage in classroom
content or activities (competence) revealed itself as an improved ability to offer suggestions and participate in group or class decision making. This was obvious in that 11.3% of the participants felt they could “help others” after feeling more organized as opposed to the previous 1.5% while only 2.3% of the quarter of the class that had once felt uncomfortable, still did. Reeve (2006) offered that the more supportive a teacher is the more competent the students feel and Orr agreed that “the effects of disorganization range from student/teacher frustration (relatedness), to behavioral disruptions (autonomy) to poor test performance (competence)” (Orr, 1996, p. 9). Clearly relatedness or feeling positively connected to and cared for by their teacher and classmates had improved as a result of organizational intervention in this study as well.

**Autonomy**

Being that autonomy is a student’s perception of the degree to which his/her personal contributions/tendencies are desired and welcomed in the classroom environment it can easily be understood how positive changes in competence and relatedness can be combined to improve a student’s feelings of autonomy in the classroom as well. If nothing, this study has helped to build an understanding of how organization can positively influence achievement and how that might lead to increased feelings of self-efficacy (McLean, 1995) which together may fuel initial feelings of self-motivation (Berger, 2003; Foley, 1989) in relation to autonomy. This perception, dictates how willing a student may be to offer authentic thoughts and opinions in the classroom. The fact that the number of students who felt they “should keep quiet” in class went from 11% when feeling unprepared to just 3.8% in lieu of being/feeling more organized speaks
to this effect. It was anticipated that students who feel their thoughts are valued and accepted are more inclined to think and act autonomously in the classroom. In this regard, these students had achieved immunity to external forces of motivation, which lends itself to engagement and creativity leading to even higher achievement according to Hennessey (2001) and in theory recreates the positive cycle proposed by this study, of self-motivation that begins with the ability to be organized (see Figure 1).

These improvements documented by comparison through observations over the course of the entire study, as well as, by responses to student questionnaires, student interviews and the teacher interviews when combined, overwhelmingly supported a relationship between organizational skills and motivation through their illustration of how those skills impact the psychological needs that in turn determine our motivation. While there are a great many facets of this relationship which remain to be explored in an effort to better understand how to manipulate this knowledge to the advantage of curriculum and the development of students, these results answer the proposed research question and take the first step toward a greater understanding.

**Conclusions**

At its onset, the current study had as its main objective, the exploration of how the organizational skills of students impact their competence, relatedness and autonomy as a means of understanding how organizational skills can impact motivation in those students. Framed by Self-Determination Theory (Deci & Ryan, 2000) and illustrated in Figure 1, the study proposed that organizational skills and motivation had a self-perpetuating relationship in which organizational skills were one of the factors that could
influence a student’s initial academic success or failure either building or diminishing his/her competence, thus influencing that student’s ability to relate and participate in the classroom. As anticipated by this study, those three elements would combine to determine a student’s ability to be self-motivated in the learning environment and as such, influence the future success or failure of the student beginning the cycle of motivation or lack thereof all over again.

To determine whether this was the case, the study examined the impact increasing organizational skills of students could have on motivation by applying an organizational skills intervention to a classroom of public school fifth-graders. As the initial results indicated, the most highly motivated students were also the students who, as a group, had the best organizational skills and tendencies. However, as organizational skills began to improve as a result of the intervention, the effects of organizational skills on motivation could be seen in the improvements nearly all of the students were experiencing with regard to their competence, relatedness and autonomy in the classroom. This increase in organizational skills along with increased competence, relatedness and autonomy among the participants indicated that the proposed impact of organizational skills on motivation was accurate enough to warrant further exploration. While different students experienced different degrees of change with regard to both organizational skills and motivation, the study was able to conclude that the proposed relationship between student organizational skills and their motivation does, in fact, exist.
Implications for Change

This study, like many, found that organizational skills are an irreplaceable building block for success (Fry, 2005) and that the development of strong organizational skills should be an imperative part of school curriculum (Monahan & Torrisi, 2000). However, the findings of this study not only highlight organizational skills as fundamentally important to education as previous studies have, they also provide a glimpse at what organizational skills can do for motivation which extends itself far beyond the walls of the classroom into every facet of everyday lives. Though others have found that organization can improve one or another of the psychological needs that influence motivation (Foley, 1989; Lobay, 1993; Monahan et al., 2000; Orr, 1996), few studies have attempted to study the effects of organization on all three of those needs as a means of ultimately understanding its effects on motivation. Being that both organizational skills and motivation are ongoing concerns for many classroom teachers and students, this study consequently helped to reveal a more detailed account of the relationship between the two issues which might help to increase the importance of making organizational skills an indispensable element of elementary school curricula. Guided by SDT, this study revealed that students can use a tool like organization to help them perpetuate themselves toward greater success, better relationships and higher functioning.
Significance of the Study

At the onset of this study it was offered that “research on the conditions that foster versus undermine positive human potentials has both theoretical import and practical significance because it can contribute not only to formal knowledge of the causes of human behavior but also to the design of social environments that optimize people’s development, performance, and well-being” (Deci & Ryan, 2000, p. 68). As such, this study has contributed to this body of knowledge by exploring a relationship that has the potential to impact the psychological needs whose fulfillment can propel each individual toward being the best version of him/herself (Deci & Ryan, 2000). If educators can take notice of the potential this relationship can afford their students and use these findings to support an ongoing presence of organizational skills support in their classrooms, the effects on student motivation could be great indeed. Furthermore, allowing this information to be applied to future teacher preparation courses, may lend itself to creating a new generation of young teachers who possess a better understanding of how to help students learn to help themselves.

Limitations and Recommendations

The research here demonstrates that organizational skills are a good fundamental place to start for teachers, parents, coaches and counselors looking to help their students improve their self-motivation in any of their academic or extracurricular endeavors. As with any study though there were elements in this one that found great success, as well as those that could be improved in the future. The intervention applied during this study for one, found a great deal of success among fifth grade students. Time and scope however,
proved to be limitations to its success in that the researcher found that more permanent organizational intervention may be necessary for some students, especially those who are very poorly organized and poorly motivated to begin with, as those students in this study retained the least of the intervention.

While the six week intervention planned for this study did provide an enormous amount of data to support the proposed relationship between organizational skills and motivation, the researcher felt that more substantial improvements to motivation might have been documented had the intervention been longer and applied to a more broad spectrum of students. Providing the same intervention for a longer or more permanent interval may have helped these students retain and improve more with regard to organization and motivation respectively. Expanding the scope of the study to include more students or perhaps the entirety of one grade level may have helped to create a greater sense of camaraderie among them perhaps increasing the effect of the intervention as a result of increasing the potential for reinforcement among peers. It may also have provided better information regarding students who appeared organized yet unmotivated and remained as outliers in this study. Though they were a small minority within the participant group, the constraints of time did not allow for further exploration as to why this phenomenon existed. Lengthening the processes and expanding it to include a larger participant group, may allow for answers to this question as well as other questions regarding race/ethnicity, gender and age in relation to organization and motivation.
Other considerations may have also proved to be limitations in a study like this. Teacher bias in categorizing students into motivational categories could have had a significant role in altering the results. This was not observed to be the case here as what the researcher observed corresponded to what the teacher reported regarding student motivational levels. Furthermore, issues like whether or not the class is engaging and challenging can also threaten the interpretation of what students report regarding school and what is observed regarding motivation. Once again, this was not observed to be the case in this study, but should be considered in future ones. Finally, even students present a host of considerations that may become limitations to an examination such as this. Learning/behavior issues, home environment and familial support all play an important role in determining how a student will act and perform in school both with regard to organization, motivation and otherwise. Such issues could definitely influence data and interpretations changing or skewing the results to a study like this and should be controlled for moreso in future investigations.

This investigation was fortunate enough to have avoided many of these issues and otherwise found that the intervention used in this study was simplistic enough that it did not encroach very much at all on classroom learning and was easy enough for students to follow without being frustrated. As such, it would be an easy program to start with on a school-wide or district-wide basis for schools looking to enhance their students through the benefits of teaching organizational skills. The researcher found that with many students at this stage of development, organization should be applied and practiced as much as possible in as many different arenas as possible so that the benefits of such skills
can lead to the most reward. Making organizational skills an expectation on the school or district level may help students to apply more value to those skills, which may in turn support their desire to improve them.

Extended exposure to organizational skills intervention and a more broad application of such an intervention are two facets of this study that should most definitely be explored further. Future research may also consider exploring different approaches to intervention with respect to grade level and developmental functioning, modifying the intervention accordingly or even applying two different interventions in a comparison study to gain a deeper understanding of what will work best for which students. There are many directions the findings presented here can be taken. As for this researcher, an exploration of how critical students of different motivational categories are on themselves and their performance is one that will be explored. In all, there is a great deal that educators can offer their students simply by being cognizant of the advantages reinforcement of some fundamental skills can afford. This study acknowledges that improving motivation in our students may not be the “silver bullet” for all of the educational and life obstacles they may face, as many critics argue there are other more important factors at work. However, this study maintains that motivation is a quality that can move students in the right direction, whatever that may be on an individual basis. Subsequently, as the study has revealed with the results of their impact on motivation, organizational skills are perhaps just one of many skill sets that should no longer be overlooked in the process of developing and improving our students through curriculum.
APPENDIX A

PARENT LETTER OF INTRODUCTION
April 21, 2010

Dear Parents:

My name is Vesna Cejovic and I am a doctoral candidate at Loyola University Chicago’s, School of Education. In 2009, I conducted a pilot of my research project at V H Nelson School in Ms. Molnar’s fifth grade classroom. We developed a fantastic working relationship and the project turned out to be a great success for the class. We will be doing a similar project in Ms. Molnar’s class this year, but to do so we would like to get your permission in order for your student to be able to participate.

The project focuses on students’ organizational skills and how that effects their motivation. During the course of the project students will learn new organizational skills and strategies while reinforcing old ones like using their assignment notebook more regularly. They will be provided with time to practice these skills and will be taught how to incorporate them into both school and other daily activities. As part of the program students will be asked to complete a short questionnaire to provide us with their thoughts about organization and learning about it. Some students will be asked to participate in a short interview with me that will include questions about the importance of organization and its effect on their feelings about school and schoolwork. The project will also keep track of student’s organizational habits with photographs and photocopies.

This project is meant to improve student organizational skills in order to examine how that might effect student motivation. Your child’s name will not be used on any surveys or interviews, their identity will be completely hidden and only accessible to me. You may be assured that if at any time your child chooses not to participate they will be allowed to without any consequences whatsoever.

In cooperation with Loyola University Chicago, Nelson Elementary School and Ms. Molnar, I would like to thank you in advance for allowing your child to participate in this research. Learning the importance of organizational skills will help us help your student along the way and enhance their learning experience. Should you have any questions feel free to contact myself or Ms. Molnar, we would be happy oblige.

Sincerely,

Vesna Cejovic
APPENDIX B

PARENT CONSENT FORM
Project Title: Student Organizational Skills and Motivation: What’s the connection?
Researcher: Vesna Cejovic
Faculty Sponsor: Dr. Ruanda Garth-McCullough

Introduction:
Your child is being asked to take part in a research study being conducted by Vesna Cejovic for a dissertation under the supervision of Dr. Ruanda Garth-McCullough in the School of Education at Loyola University of Chicago.

Your child is being asked to participate in learning about organizational skills because he/she is a fifth grade student in Ms. Molnar’s Class at V H Nelson Elementary School and as such can provide us with a specific perspective of organizational skills and their importance to motivation.

Purpose:
The goal of this project is to better understand the role students’ organizational skills have in determining their ability to be self-motivated learners. The project will try to improve student organizational skills in order to examine how that might effect student motivation. The data collected from student questionnaires, desks, assignment notebooks and interviews will provide us with the information necessary to answer our research question(s). The project will last 10 weeks.

Procedures:
Your student will be asked to participate in 3-4 learning activities designed to improve organizational skills which will be incorporated into the regular curriculum. These activities will include things like weekly desk clean-up, assignment notebook check, learning time management and task prioritization. Once before those activities and once after, your student will be asked to complete a simple five question survey about organization and its impact on school.

For the students randomly chosen to be interviewed, the interview will take approximately 10 minutes. During the interview they will be asked questions about organization and its importance, about their own organizational habits, their views on school and what could improve their experience, their motivation in class, etc.

The interview will be audio-taped and transcribed. The results of your child’s interview will be used to report on the effect organizational skills have on student competence, relatedness and autonomy in school and as a result on their motivation, for the purpose of this dissertation.

Any photographs taken during this study will not include your child but may include the contents of his/her desk, as will photocopies of assignment notebook pages from time to time. No Names will be attached to any of these images.
**Risks/Benefits:**
The risks associated with participation in this study are minimal.

The benefits however, include possible improvement of organizational skills and habits. In some cases improvement of organizational skills may lead to academic or social improvement.

**Confidentiality:**
Your child or your child’s name will NOT be referenced in any material generated as a result of this research.

**Voluntary Participation:**
Your child’s participation in this project is voluntary. Even if you decide to participate, you may withdraw from the project without penalty at any point during the process. You may also choose not to answer specific questions or discuss certain subjects during the interview or to ask that portions of our discussion or your responses not be recorded.

**Contacts and Questions:**
If you have any questions about this research project, feel free to contact Vesna Cejovic at 847.414.5599/ vcejovi@luc.edu or the faculty sponsor Dr. Ruanda Garth-McCullough at 312.915.6918/ rmccull1@luc.edu.

If you have questions about your rights as a research participant, please feel free to contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

**Statement of Consent:**
I agree to allow my child ____________________to participate in this study as described above. (print child’s name)

______________________________________________________________________
Parent/Guardian Signature                                                                 Date

______________________________________________________________________
Researcher’s Signature                                                                 Date
APPENDIX C

STUDENT ASSENT FORM
Hello, my name is Vesna Cejovic. I am going to school to learn how to be a better teacher. Part of my homework is to learn how organization affects school and how it effects you.

You were chosen for the study because you are a fifth grade student. Please read this form and ask any questions before agreeing to be part of the study.

**About the Project:**
I am asking you to participate in some activities in your class that will teach you some new things about organization. I will ask you to fill out two surveys during the project that will ask you questions about student organization and school. I will also be asking some of you to complete a couple of 10-minute interviews with me that will also ask questions about organization and you.

**Compensation:**
There is no compensation for taking part in this study.

**Risks and benefits of being in the study:**
It is possible that being in this study may take some of your personal time. The results will give information that may be used for teachers to better understand student organization.

**IT’S YOUR CHOICE:**
You don’t have to do the surveys or the interviews. You won’t get into trouble with anyone if you say no. The interview answers may help teachers understand student organization better. It is completely up to you.

**Privacy:**
Everything you tell me during the interview will be kept private. That means no one else will know your name or the answers that you gave.

**Asking questions:**
If you have any questions, you or your parents can call or e-mail me at 847.414.5599 or vcejovi@luc.edu

Please sign your name below if you want to join this project.

Child Name______________________________________

Child Signature___________________________________  Date:_____________

Researcher Signature_______________________________
APPENDIX D

TEACHER CONSENT FORM
Project Title: Student Organizational Skills and Motivation: What’s the connection?
Researcher: Vesna Cejovic
Faculty Sponsor: Dr. Ruanda Garth-McCullough

Introduction:
You are being asked to take part in a research study being conducted by Vesna Cejovic for a dissertation under the supervision of Dr. Ruanda Garth-McCullough in the School of Education at Loyola University of Chicago.

You are being asked to participate in learning about organizational skills because you are a fifth grade teacher at V H Nelson Elementary School and as such can provide us with a specific perspective of organizational skills and their importance to motivation.

Purpose:
The goal of this project is to better understand the role students’ organizational skills have in determining their ability to be self-motivated learners. The project will try to improve student organizational skills in order to examine how that might effect student motivation. The data collected from student questionnaires, desks, assignment notebooks and interviews will provide us with the information necessary to answer our research question(s). The project will last 10 weeks.

Procedures:
You will be asked to participate in 3-4 learning activities designed to improve organizational skills which will be incorporated into the regular curriculum. These activities will include things like weekly desk clean-up, assignment notebook check, learning time management and task prioritization. Once before those activities and once after you will be asked to complete a ten minute interview about organization and its impact on school and student motivation in your classroom.

The interview will be audio-taped and transcribed. The results of your interview will be used to report on the effect organizational skills have on student competence, relatedness and autonomy in school and as a result on their motivation, for the purpose of this dissertation.

Risks/Benefits:
The risks associated with participation in this study are minimal.

The benefits however, include possible improvement of organizational skills and habits. In some cases improvement of organizational skills may lead to academic or social improvement.

Confidentiality:
Your name will NOT be referenced in any material generated as a result of this research.
Voluntary Participation:
Your participation in this project is voluntary. Even if you decide to participate, you may withdraw from the project without penalty at any point during the process. You may also choose not to answer specific questions or discuss certain subjects during the interview or to ask that portions of our discussion or your responses not be recorded.

Contacts and Questions:
If you have any questions about this research project, feel free to contact Vesna Cejovic at 847.414.5599/ vcejovi@luc.edu or the faculty sponsor Dr. Ruanda Garth-McCullough at 312.915.6918/ rmccul1@luc.edu.

If you have questions about your rights as a research participant, please feel free to contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

Statement of Consent:
I agree to participate in this study as described above.

__________________________________________                                _____________
Teacher Signature                                                                           Date

__________________________________________                                _____________
Researcher’s Signature                                                                              Date
APPENDIX E

PRE-INTERVENTION STUDENT QUESTIONNAIRE
PLEASE ANSWER THE FOLLOWING QUESTIONS

1. How organized do you think you are? Please color up to the appropriate level on the thermometer.

   ![Thermometer]
   - Very Organized
   - Sort of Organized
   - Not Very Organized

2. What do you think about organization?

   ![Options]
   - Not Important
   - Kind of Important
   - Important

3. How might learning about organization help you or others around you?

4. When I feel like I am NOT organized and NOT prepared for class I feel...
   (Check all the items that apply to you)
   - like I know what is going on
   - like I can work on my own
   - like I can answer questions
   - no different than before
   - comfortable talking to people
   - like I should keep quiet
   - like I get more work done
   - uncomfortable
   - like I can help others
   - like I need help
   - confused
   - ready to work

5. Do you think teachers should teach students about organization? Why?
APPENDIX F

POST-INTERVENTION STUDENT QUESTIONNAIRE
PLEASE ANSWER THE FOLLOWING QUESTIONS.

1. How organized do you think you are? Please color up to the appropriate level on the thermometer.

   Very Organized

   Sort of Organized

   Not Very Organized

3. How do you feel about organization?

   Not Important

   Kind of Important

   Really Important

3. How has learning about organization changed you or people around you?

4. When I feel like I AM organized and prepared for class I feel…
   (Check all the items that apply to you)

   ___like I know what is going on   ___like I should keep quiet
   ___like I can work on my own   ___like I get more work done
   ___like I can answer questions   ___uncomfortable
   ___no different than before   ___like I can help others   ___like I need help
   ___comfortable talking to people   ___confused   ___ready to work

5. Do you think teachers should teach students about organization? Why?
APPENDIX G

STUDENT DESK OBSERVATION RUBRIC AND
STUDENT ASSIGNMENT NOTEBOOK RUBRIC
**Student Desk Organization Rubric**
(for categorizing student organizational skills through photographs)

<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Very Organized Student Desk</strong></td>
<td>• NO LOOSE- paper, supplies or debris&lt;br&gt;• Almost all of the daily materials, present and functional (folders, notebooks, books, writing utensils, etc.)&lt;br&gt;• Materials that are neatly arranged for easy accessibility</td>
</tr>
<tr>
<td><strong>A Sort of Organized Student Desk</strong></td>
<td>• SOME LOOSE- paper, supplies or debris&lt;br&gt;• Most of the daily materials, present and functional (folders, notebooks, books, writing utensils, etc.)&lt;br&gt;• Materials in somewhat of an order</td>
</tr>
<tr>
<td><strong>An Unorganized Student Desk</strong></td>
<td>• A GREAT DEAL OF LOOSE- papers, supplies or debris&lt;br&gt;• Few or none of the daily materials, missing or broken&lt;br&gt;• No order</td>
</tr>
</tbody>
</table>

**Student Assignment Notebook Rubric**
(for determining frequency of student use of assignment notebooks for organizational purposes)

<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Very Organized Student Assignment Notebook</strong></td>
<td>• Assignments for 4-5 days a week&lt;br&gt;• Clearly and completely recorded</td>
</tr>
<tr>
<td><strong>A Sort of Organized Student Assignment Notebook</strong></td>
<td>• Assignments for 2-3 days a week&lt;br&gt;• Somewhat clearly and completely recorded</td>
</tr>
<tr>
<td><strong>An Unorganized Student Assignment Notebook</strong></td>
<td>• Assignments for 0-1 day a week&lt;br&gt;• Unclear and often incomplete</td>
</tr>
</tbody>
</table>
APPENDIX H

PRE-INTERVENTION STUDENT INTERVIEW GUIDE
1. What does “being organized” mean to you? Give some examples.
   • Perhaps describe an organized/unorganized student.
   • Why is being organized important? Or why not?
   • What do you need to be organized?

2. Would you describe yourself as organized or unorganized? Give some specific examples.
   • Why or why not?
   • Do you forget things? What things?
   • How often do you ask others for supplies?
   • How often do you use your assignment notebook? What do you use it for?

3. How do you like school?
   • What do you like most/least? Why?
   • What things are frustrating or difficult for you?
   • Do you ask for help/help others?

4. How do you feel in school?
   • How often are you trying your best?
   • How are you doing in school? Could you do better? What gets in the way?
   • Does that make you want to try harder or give up sometimes?
   • Do you talk more or less?
   • How do you think your teacher feels about that? You?

5. What helps you to feel good about school? /What could help you feel better about school?
   • How might you achieve that? List some ideas.
APPENDIX I

POST-INTERVENTION STUDENT INTERVIEW GUIDE
1. What does “being organized” mean to you? Give some examples.
   - Perhaps describe an organized/unorganized student.
   - Why is being organized important? Or why not?
   - What do you need to be organized?

2. Would you describe yourself as organized or unorganized? Give some specific examples.
   - Why or why not?
   - Do you forget things? What things?
   - How often do you ask others for supplies?
   - How often do you use your assignment notebook? What do you use it for?

3. How do you like school?
   - What do you like most/least? Why?
   - What things are frustrating or difficult for you?
   - Do you ask for help/help others?

4. How do you feel in school?
   - How often are you trying your best?
   - How are you doing in school? Could you do better? What gets in the way?
   - Does that make you want to try harder or give up sometimes?
   - Do you talk more or less?
   - How do you think your teacher feels about that? You?

5. What helps you to feel good about school? What could help you feel better about school?
   - How might you achieve that? List some ideas.
APPENDIX J

PRE-INTERVENTION TEACHER INTERVIEW GUIDE
1. What is the general level of organization displayed among your students?
   • How many are organized/unorganized?
   • What is “being organized” to you?

2. Describe the atmosphere in the classroom currently?
   • How would an increase in organization change the atmosphere?

3. Describe your relationship with your students?
   • Your tone? Body language? Speech?
   • Does it differ among students? More contact or less?
   • Do you talk more to certain students? What do you talk about?

4. What are the highlights and lowlights of student self-motivation in your class?
   • Do you feel your students are as self-motivated as they should be?
   • Why do you think certain student are more motivated than others?

APPENDIX K

POST-INTERVENTION TEACHER INTERVIEW GUIDE
1. How has the level of organization among your students changed at all?

2. Describe the atmosphere in your classroom?

3. How has your relationship with your class changed?
   - Has it changed more with certain students as opposed to others
   - Which students? Why?

4. What kind of changes in student self-motivation have you noticed over the last ten weeks?

5. Explain what effect teaching/increasing organization has had on your students and their self-motivation and what you attribute that to?
1. GET  Assignment Notebook
2. WRITE Assignments
3. GATHER  Materials
4. CHECK  (stamp)
5. PACK  Materials
APPENDIX M

TEACHER CATEGORIZATION SHEET
Teacher Student Self-Motivation Evaluation Form

Please list the students names you feel belong in each of the following categories according to the criteria provided.

<table>
<thead>
<tr>
<th>HIGHLY SELF-MOTIVATED</th>
<th>MODERATELY SELF-MOTIVATED</th>
<th>POORLY SELF-MOTIVATED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Almost Always…</strong></td>
<td><strong>Sometimes…</strong></td>
<td><strong>Almost Never…</strong></td>
</tr>
<tr>
<td>Energetic/Alert not Distractive</td>
<td>Energetic/Alert not Distractive</td>
<td>Energetic/Alert not Distractive</td>
</tr>
<tr>
<td>Focused/On Task &amp; Attentive</td>
<td>Focused/On Task &amp; Attentive</td>
<td>Focused/On Task &amp; Attentive</td>
</tr>
<tr>
<td>Engaged as Constructive Participants</td>
<td>Engaged as Constructive Participants</td>
<td>Engaged as Constructive Participants</td>
</tr>
<tr>
<td>Little Prompting</td>
<td>Some Prompting</td>
<td>Constant Prompting</td>
</tr>
</tbody>
</table>
REFERENCES


VITA

Vesna Cejovic is the daughter of Zeljko and Svetlana Kljajic. Born in Chicago on July 23, 1981, she currently resides in Lincolnwood with her husband Filip and two children.

Vesna Cejovic attended Jamieson Elementary School in Chicago until the sixth grade when her family moved to Lincolnwood where she would complete her elementary and secondary education at Lincoln Hall Middle School and Niles West High School respectively. Mrs. Cejovic graduated from Loyola University Chicago in 2001 with a Bachelor of Arts and Sciences degree in History accompanied by a minor in Professional Education and a Type 9 teaching certificate. In 2004 she earned a Master of Education degree in Curriculum and Instruction with a concentration in School Improvement from Loyola University Chicago as well.

Vesna began her career as an educator long before she stepped into a classroom. During her years as an undergraduate and graduate student she spent a significant amount of time volunteering both in Chicago and overseas as a counselor to children and refugee families from her war-torn homeland of Serbia. Helping people learn to resettle and assimilate to a new world and a new culture taught her a great deal about what tragedy and poverty can do to a person and how it affects their ability to learn. It pushed her to understand education in the deepest sense of the word. She later served as a one-on-one
classroom aid at Edison Elementary School in Morton Grove briefly before starting her
own family and continuing her doctoral education full-time.

Mrs. Cejovic has long been an advocate of using education to bridge and repair
the political and economic voids left in the wake of war. She has spent the last few years
building relationships with Serbian Consuls, Ambassadors, the Ministries of Education
and University liaisons in hopes that she may one day be able to do much more.
The Dissertation submitted by Vesna Cejovic has been read and approved by the following committee:

Dr. Ruanda Garth-McCullough, Director
Assistant Professor, School of Education
Loyola University Chicago

Dr. Ernestine Riggs
Associate Professor, School of Education
Loyola University Chicago

Dr. Barney Berlin
Associate Professor Emeritus, School of Education
Loyola University Chicago

Dr. Lori Bein
Superintendent, Roselle School District